# Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of Section 3 of the Cable	)	
Television Consumer Protection and Competition	)	MM Docket No. 92-266
Act of 1992	)	
	)	
Statistical Report on Average Rates for Basic	)	
Service, Cable Programming Service, and	)	
Equipment	)	

## REPORT ON CABLE INDUSTRY PRICES

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By the Chief, Media Bureau:

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#### I. INTRODUCTION AND EXECUTIVE SUMMARY

- 1. Section 623(k) of the Communications Act of 1934, as amended by the Cable Television Consumer Protection and Competition Act of 1992 ("Cable Act"), requires the Commission to publish annually a statistical report on average rates charged by cable operators for basic service, other cable programming, and cable equipment. The Cable Act also requires the Commission to compare the rates of cable operators subject to "effective competition," as identified through specific adjudications, with those of cable operators that have not been found subject to effective competition. Key findings are presented below.
- 2. Average prices for all communities. The average monthly price of expanded basic service (the combined price of basic service and the most subscribed cable programming tier excluding taxes and fees) for all communities surveyed increased by 5.9 percent for the 12 months ending January 1, 2009, to \$52.37, compared to an increase of 0.1 percent for the Consumer Price Index (CPI). Chart 1 shows the trend in average cable prices from 1995 to 2009 compared with the trend in the CPI, All Items. Over this 14-year period, cable prices have grown from \$22.35 to \$52.37, an increase of 134 percent (6.3 percent on a compound average annual basis, compared to an increase of 39 percent for the CPI (2.4

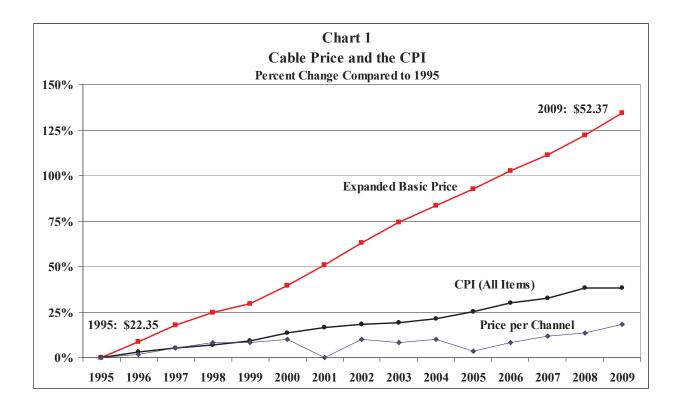
<sup>1</sup> Section 623(k) was adopted as Section 3(k) of the Cable Act, Pub. L. No. 102-385, 106 Stat. 1460, codified at 47 U.S.C. § 543(k).

<sup>3</sup> See 47 U.S.C. § 543(k)(1) (cross-referencing 47 U.S.C. § 543(a)(2)). Under the Cable Act, a cable operator may obtain a finding of "effective competition" for a community that meets one of four tests: (1) fewer than 30 percent of households subscribe to the cable operator's video programming service ("LP Test" or "low penetration test"): (2) at least two MVPDs each offer a comparable service to at least 50 percent of households and at least 15 percent of all households subscribe to such service other than from the largest MVPD ("50/15 test"; these systems are reported in the "second operator" and "DBS market share" columns in the charts and tables below); (3) a municipality is an MVPD to at least 50 percent of households ("municipal test"; municipal systems are surveyed but not reported separately below); or (4) a local exchange carrier or its affiliate, or an MVPD using the facilities of such carrier or its affiliate, offers multichannel video programming service by means other than direct broadcast satellite in an area that is also served by an unaffiliated cable operator ("LEC test"; these systems are reported in the "second cable operator" or "wireless operator" categories. . See 47 C.F.R. § 76.905(b). In order to improve sampling accuracy, wireless MVPD are sampled and reported separately. If a community is deemed subject to effective competition, the local franchising authority may not regulate rates for basic service, unless it seeks and is granted recertification. See 47 U.S.C. §§ 543(a)(2); 47 C.F.R. § 916(a). Operators serving communities where no finding of effective competition has been made may face market-based competition which would be sufficient to warrant a finding of effective competition, but for various reasons may not have filed a request for such a finding, or if filed, their request may be pending or may have been granted after the cut-off date for the selection of our survey sample.

<sup>&</sup>lt;sup>2</sup> In this report, "cable operator" refers to a multichannel video programming distributor (MVPD) operating a wireline system, such as, but not limited to, an operator that makes available for purchase, by subscribers or customers, multiple channels of video programming. *See* 47 C.F.R. § 76.905(d). Our survey encompasses traditional cable operators, municipalities, and telephone companies, including Verizon FiOS. The survey does not collect prices charged by DBS, wireless MVPD operators, and AT&T U-verse service because there are no associated FCC Community Unit Identifier codes. *See* Appendix at 1.

<sup>&</sup>lt;sup>4</sup> "Tier" refers to a cable service for which a separate rate is charged. *See* 47 U.S.C. § 522(17). Operators are required to offer an entry-level "basic service" tier, which must include, at a minimum, all commercial and noncommercial local broadcast stations entitled to carriage under the must-carry provisions of the Communications Act of 1934, 47 U.S.C. §§ 534-35, as well as any other local broadcast station provided to any subscriber, and public, educational, and governmental (PEG) access channels that the local franchise authority requires the operator to carry. *See* 47 U.S.C. § 543(b)(7). As used in this report, the term "cable programming" refers to a tier of channels other than the basic service tier channels or channels for which per-channel or per-program charges apply. *See* 47 U.S.C. § 543(k)(1)(2). "Cable equipment" refers to a cable converter box, remote control unit, and other equipment used to access cable services. *See* 47 U.S.C. § 543(b)(3). Basic service and cable programming prices do not include cable equipment or installation charges. Cable equipment prices do not include installation charges.

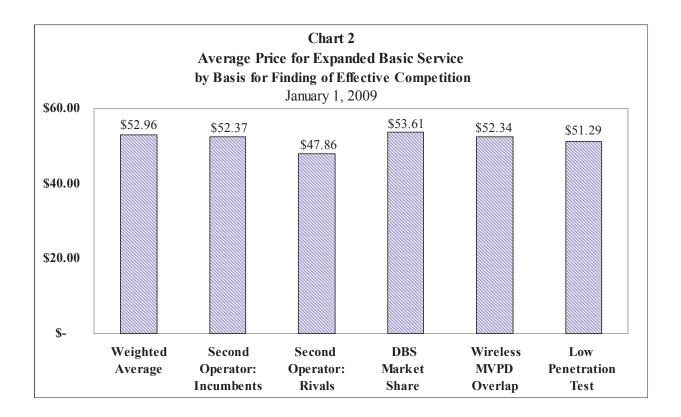
percent on a compound average annual basis) over the same period. The price per channel (price divided by the number of channels) for subscribers who purchase expanded basic service increased from 60 cents in 1995 to 71 cents in 2009, an increase of 18 percent (1.2 percent on a compound average annual basis).



- 3. Average prices in communities with a finding of effective competition compared with prices in noncompetitive communities. Over the year ending January 1, 2009, the average price of expanded basic service increased by 5.7 percent, to \$52.10, for those operators serving communities for which no effective competition finding was made ("noncompetitive communities"). The average price increased by 6.6 percent, to \$52.96, for the group of operators the Commission has found to face effective competition.<sup>5</sup>
- 4. Chart 2 shows the average prices for expanded basic service for subgroups of communities with a finding of effective competition as of January 1, 2009. Compared to the overall average price of \$52.96 charged by operators in the effective competition communities, average prices were 1.1 percent lower (\$52.37) for incumbent operators in communities with a rival operator; 9.6 percent lower (\$47.86) for rival operators; 1.2 percent higher (\$53.61) when a finding was granted based on DBS market share exceeding the 15 percent threshold established by the statute; 1.2 percent lower (\$52.34) in areas in range of a wireless multichannel video programming distributor ("MVPD"); and 3.2 percent lower (\$51.29) where the operator met the low penetration test for effective competition as a result of serving fewer than 30 percent of households.

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<sup>&</sup>lt;sup>5</sup> Communities for which the FCC has made a finding of "effective competition" are referred to as "effective competition communities" or "communities with effective competition." If a finding of effective competition is made in a particular community, the cable operator serving that community is not subject to price regulation of its basic service by the local franchise authority. 47 U.S.C. § 543(a)(2).



- 5. These price comparisons differ, in some respects, from past surveys. In the past the Commission found that average rates for expanded basic service in effective competition communities generally have been lower than in communities that have not had a finding of effective competition. In contrast, in 2009, the average price for expanded basic service was \$0.86 higher in effective competition communities (\$52.96) than in noncompetitive communities (\$52.10). Several factors may have contributed to this change. In 2009, the Commission issued a large number of findings of effective competition, with the total number of markets found subject to effective competition increasing from 3,205 in the 2008 survey to 7,034 in the 2009 survey. The increase in the number of findings of effective competition was generated largely on the basis of the DBS market share test (DBS market share exceeding the 15 percent threshold established by the statute). The number of communities meeting the DBS market share test (the "50/15" test) more than doubled, increasing from 2,343 for the prior survey year to 4,990 for the 2009 survey year. In addition, communities where incumbent operators were found to face effective competition based on the presence of a second operator increased from 165 to 470. These new findings of effective competition occurred mostly in communities in which incumbent operators charged relatively high prices for expanded basic service.
- 6. *Programming Expenses*. Operators in the survey incurred average increases in monthly programming expenses per subscriber of \$1.32 or 8 percent for expanded basic service, from \$16.35 in

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<sup>&</sup>lt;sup>6</sup> See e.g., Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment: 24 FCC Rcd 259 (2009); 21 FCC Rcd 15087 (2006); 20 FCC Rcd 2718 (2005); 18 FCC Rcd 13284 (2003); and 17 FCC Rcd 6301 (2002).

<sup>&</sup>lt;sup>7</sup> For example, for incumbents in the second operator subgroup in the 2009 survey, the mean price for January 1, 2009 for expanded basic service was \$49.12 in communities with a finding of effective competition at the time of the 2008 survey, and \$53.92 in communities for which the effective competition finding was made after the 2008 survey. Continued observation of this phenomenon is necessary to determine whether these differences reflect a one-time occurrence, a fundamental shift in the competitive process, or simply sampling variation.

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2007 to \$17.67 in 2008. This increase of \$1.32 was equivalent to 55 percent of the increase of \$2.38 in price from \$47.27 in 2007 to \$49.65 in 2008, for expanded basic service.

7. Service Packages. The survey results show that operators offered digital programming, Internet access, and telephony to over 90 percent of their subscribers. As of January 1, 2009, digital video programming was offered to 98 percent of subscribers and 63 percent of all basic service subscribers subscribed; Internet access was offered to 96 percent of subscribers and 50 percent of all basic service subscribers subscribed; and telephone service was offered to 91 percent of subscribers and 28 percent of all basic service subscribers subscribers subscribed. The survey found that 28 percent of all subscribers take a video and Internet "double play" package and 25 percent take a video, Internet, and telephony "triple play" package; thus, more than one-half (53 percent) of basic service subscribers nationwide take an enhanced services package. Of the remaining subscribers, 39 percent take video only and 8 percent take other packages or services. Finally, 47 percent of subscribers were offered a family-friendly programming package as of January 1, 2009, though less than one-half of one percent actually subscribed.

### II. OVERVIEW OF THE SURVEY

- 8. The information and analysis provided in this Report are based on the Commission's 2009 survey of cable industry prices ("survey"). The survey requested data from a random sample of cable operators serving two groups of communities: (1) communities where operators have not been found to meet one of the statutory tests for effective competition ("noncompetitive communities"); and (2) communities where operators have been found to meet one of the statutory tests for effective competition and, as a result, the cable operator serving that community is not subject to price regulation of its basic service by the local franchise authority ("effective competition communities"). 10
- 9. In selecting cable operators for our sample from the group of effective competition communities, we relied on the Commission's formal findings of effective competition, which are based on the statutory definition of effective competition in the Cable Act. Most of the effective competition cases that come before the Commission are based on competition between two or more MVPDs. However, under the statutory definition of effective competition, not all cases are made on the basis of competition between video providers; some cases are based on low subscriber penetration. Our list of communities granted a finding of effective competition is limited to adjudicated findings of effective competition. We are unable to take into account those areas of the country where the conditions for a finding may be present (*i.e.*, where sufficient market-based competition may be present to warrant such a finding), but no finding has been granted as of the date our sample was drawn.

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<sup>&</sup>lt;sup>8</sup> Subscriber information was collected regarding basic service subscribers (who take video) and non-video subscribers. Other packages and services may include a video and telephony double-play as well as non-video subscribers taking Internet and/or telephony services only.

<sup>&</sup>lt;sup>9</sup> The Commission directed a randomly selected sample of cable operators to respond to a survey questionnaire that requested data primarily as of January 1, 2008 and January 1, 2009. *See Implementation of Section 3 of the Cable Television Consumer Protection and Competition Act of 1992, Statistical Report on Average Prices for Basic Service, Cable Programming Services, and Equipment,* 24 FCC Rcd 4518 (2009).

<sup>&</sup>lt;sup>10</sup> To collect the data for the 2009 survey, we surveyed operators that served 359 out of the 26,868 noncompetitive communities and operators that served 413 out of the 7,034 communities that were granted a finding of effective competition pursuant to the statute. See Attachment 1 for further details about the surveyed operators.

<sup>&</sup>lt;sup>11</sup> See note 3, supra.

- 10. Brief Overview of Survey Methodology. <sup>12</sup> The sample of cable operators granted a finding of effective competition was selected from subgroups according to the primary basis for such a finding. The first subgroup comprises communities in which a second wireline operator's offerings provided the basis for the finding of effective competition ("second operator" subgroup). In this subgroup, we sampled both incumbent operators and second operators, or "rival" operators. <sup>13</sup> This subgroup includes communities meeting either: (a) the 50/15 test based on the presence of at least two MVPDs or (b) the local exchange carrier ("LEC") test based on the presence of at least two MVPDs, one of which is a LEC or an entity affiliated with or using the facilities of a LEC. The second subgroup comprises communities in which a sufficient percentage of households subscribe to DBS service to substantiate a finding of effective competition under the 50/15 test ("DBS" subgroup). <sup>14</sup> The third subgroup consists of communities for which the findings were based on the offerings of a rival MVPD providing wireless video programming ("wireless MVPD" subgroup). <sup>15</sup> The fourth subgroup consists of operators that met the low penetration test at the time of the finding by serving fewer than 30 percent of households in their service area ("LP Test" subgroup).
- asked to complete a questionnaire which included questions on the prices charged for video programming service offerings. The information collected was used to estimate and compare mean prices across different subgroups of operators and communities. As required by the statute, the survey focused on expanded basic service, consisting of basic service plus the most subscribed tier of other cable programming. Additionally, we collected information on the prices charged for the most highly subscribed tier of digital programming. Basic service consists of the local broadcast stations; public, educational, and governmental ("PEG") access channels; and typically a few additional channels that may be of local, regional, national, or international origin. Subscribers must purchase basic service as a prerequisite to subscribing to expanded basic, which adds programming consisting mostly of the most popular national cable networks. As of January 1, 2009, 87 percent of subscribers took at least expanded basic service, and 13 percent took basic service only. As of that date, 63 percent of subscribers took

<sup>12</sup> A description of our sampling methodology for the 2009 survey is provided in the Appendix. Attachment 1 overviews the number of observations selected for our sample and the number of survey questionnaires completed by respondents, for each group and subgroup surveyed.

<sup>&</sup>lt;sup>13</sup> The term "incumbent" refers to a cable operator that provided service before a second operator (the "rival" cable operator) entered the market.

<sup>&</sup>lt;sup>14</sup> We note that because DBS service is available nationwide with a national penetration rate greater than 15 percent, there likely are many areas of the country where DBS penetration exceeds the 15 percent threshold set forth in the "50/15" test for effective competition, but the incumbent cable operator has not requested a finding of effective competition, or if requested, such finding had not been granted as of the date our sample was drawn.

<sup>&</sup>lt;sup>15</sup> All effective competition findings associated with wireless MVPD competition have been made under the LEC test, although the Commission could also make a finding of effective competition based on the presence of a wireless MVPD under the 50/15 test assuming the wireless MVPD's service met the requirements for that test.

<sup>&</sup>lt;sup>16</sup> The term "cable programming" as used herein generally refers to the tier with (a) the most channels and (b) the most subscribers except for basic service. This cable programming tier includes channels other than those offered with basic service, other cable programming tiers such as mini tiers, or channels sold on a per-channel or per-program basis. In general, the most subscribed tier of cable programming is an analog tier, although the percentage of subscribers that take an additional tier of digital programming now exceeds 60 percent of all subscribers.

<sup>&</sup>lt;sup>17</sup> This 87 percent includes subscribers whose operators do not offer a separate expanded basic service tier but instead offer a basic service tier that includes many of the popular national networks typically associated with expanded basic. All operators are required to offer a basic service tier that includes, at minimum, those channels prescribed by statute (see note 4 above), but the statute does not require operators to offer a separate expanded basic tier, *i.e.*, an offering that includes both the basic service tier and other cable programming. When an operator offers both a basic service tier and a separate expanded basic service tier, the former is sometimes referred to as "limited (continued....)

digital service. Operators responding to the survey were asked to report prices of basic service and expanded basic as of January 1, 2008 and January 1, 2009. This permitted us to calculate the annual percentage changes for the year ending January 1, 2009.

- 12. In addition to these prices, the questionnaire asked for related information, including prices to lease cable equipment and to install cable service. Information also was gathered on factors that affect prices such as programming expenses, operating capacity, and number of subscribers to various services. The questionnaire also asked for information on the availability and prices charged for services such as a family programming package, channels sold on an individual basis ("à la carte"), and the so-called "double play" and "triple play" packages. Averages for each survey question were calculated by subgroup of communities, by the larger sample groups (operators serving communities with and without a finding of effective competition), and for communities overall.
- accuracy and reliability of the raw data upon which this report is based. Several of these steps go beyond the practices implemented in prior years. This year, for example, our survey questionnaire was fully Internet-based, which means it was provided to respondents on the Commission's Internet site and the questionnaires were completed and submitted to us on that site. Many of the questions had built-in checks for reasonableness which prompted the respondents to re-check their answers as they were completing the survey, if those answers fell outside of a predetermined "range of reasonableness" based upon our experience with prior price surveys. A second responsible party within each cable operator's company (other than the person who completed the survey) was asked to certify the completeness and accuracy of that company's responses. After receiving the submitted surveys, we examined all responses using a computer program designed specifically to identify observations with apparent inaccuracies. When a particular response was found to lie outside of its statistically-expected reasonable range or was inconsistent with the answers to other questions in the questionnaire, the computer program automatically flagged that response and we contacted the cable operator and asked that operator to re-check the flagged response and make corrections if needed.<sup>19</sup>

## III. SURVEY RESULTS

14. The comparisons required by the Cable Act are influenced by the fact that the number of cable operators with a finding of effective competition increased substantially for the 2009 survey as a result of the Commission's findings of effective competition in the community. The total number of communities found to be subject to effective competition for the 2009 survey was 7,034, more than double the 3,205 communities for the 2007/2008 survey. The latter number in turn was about 50 percent (Continued from previous page)

basic." The survey results indicate that 5 percent of subscribers receive basic service from operators that do not also offer expanded basic service, *i.e.*, from operators that do not offer a "limited basic" service.

<sup>&</sup>lt;sup>18</sup> "Double play" refers to the bundling of traditional cable video service together with Internet access service. "Triple play" refers to the bundling of traditional video service, Internet access, and telephony. Usually, these bundles of services are sold with a discount from the price that would be charged if each service were purchased separately, and also are frequently sold with substantial promotional discounts in addition to the "standard discount" already built into the package price. Our survey did not attempt to measure either of these discounts. Moreover, the instructions accompanying the survey questionnaire specifically requested that operators not provide prices that reflect promotional discounts. In section III below, however, we report the average monthly bill amount paid by subscribers who purchased video service alone or selected bundles of services. These statistics include both additions (such as taxes and franchise fees) to the "list price" cable operators were asked to report in the majority of survey questions, as well as any promotional or other discounts.

<sup>&</sup>lt;sup>19</sup> The percentage of survey responses that requires follow-up inquiries varies over time based on such factors as the familiarity of the respondents with the survey and the introduction of new questions to the survey instrument. For the 2009 survey upon which this Report is based, we contacted virtually all of the respondents with requests that they clarify or correct their answers to specific questions. Each of these operators replied with either a data correction or a reasonable explanation as to why a particular response was plausible.

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greater than the number of communities where operators obtained a finding of effective competition in the 2006 survey, 2,055. The majority of the increase in the number of findings of effective competition for the 2009 survey was generated on the basis of findings of DBS market share. The number of communities in the DBS subgroup more than doubled, increasing from 2,343 for the prior survey to 4,990 for the 2009 survey. This subgroup now accounts for 67 percent of cable subscribers in communities with a finding of effective competition. In addition, communities where incumbent cable operators were found to face effective competition based on the presence of a second operator increased from 165 to 470. The share of cable subscribers in these communities increased from 20 percent to 24 percent. These changes in the composition of the groups of operators influence many of the results shown below.

### A. Basic, Expanded Basic and Digital Services

- 15. Table 1 displays the average increases in prices for basic service and expanded basic service (which is the total of basic service and the most subscribed tier of other cable programming) showing data as of January 1, 2009 and January 1, 2008, and the percentage changes for the year ending January 1, 2009. Looking at the "Overall" column, which represents all operators surveyed, the average price of basic service increased by 6.9 percent, from \$16.52 to \$17.65. Over the same period, the price for expanded basic service increased by 5.9 percent, from \$49.43 to \$52.37. On a per channel basis, the expanded basic price averaged 71 cents per channel on January 1, 2009, an increase of 3 cents per channel from January 1, 2008. Table 1 also displays the additional price that consumers would pay above that charged for expanded basic service to purchase the most subscribed digital tier and equipment consisting of a digital set-top converter and remote control. For all operators surveyed the average additional price for digital service increased by 7.2 percent, from \$14.50 to \$15.55.
- 16. As noted, the average prices for expanded basic service in noncompetitive communities increased by 5.7 percent to \$52.10 and in effective competition communities by 6.6 percent to \$52.96. Table 1 shows the percentage differences in expanded basic prices charged by operators in effective competition communities overall and for subgroups of operators, compared with prices of operators in noncompetitive communities. Overall, as of January 1, 2009, prices for expanded basic in effective competition communities were 1.7 percent higher than prices in noncompetitive communities.
- 17. Higher prices in the DBS subgroup contributed considerably to the higher average for effective competition communities. A higher average price among incumbent cable operators in communities where a finding of effective competition was based on the presence of a second cable operator was also a contributing factor, because the new findings occurred mostly in communities in which incumbent operators charged relatively high prices for expanded basic service. But the differential also reflects that, in contrast to past surveys, expanded basic prices are growing faster in effective competition communities than in noncompetitive communities. Overall, on a per channel basis, the average price per channel was 4.2 percent lower, reflecting the fact that the effective competition communities, on average, carry more channels on expanded basic than the noncompetitive group.

<sup>20</sup> The DBS subgroup does not include prices charged by DBS operators. It consists of the prices charged by wireline operators where a finding of effective competition was granted on the basis of more than 15 percent of households in the community subscribing to DBS. New findings of effective competition occurred mostly in communities with relatively high prices. For the DBS subgroup in the 2009 survey, the mean price for January

communities with relatively high prices. For the DBS subgroup in the 2009 survey, the mean price for January 1, 2009 for expanded basic service was \$52.26 in communities with a finding of effective competition at the time of the 2008 survey, and \$55.29 in communities for which the finding was made after the 2008 survey.

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<sup>&</sup>lt;sup>21</sup> For example, for incumbents in the second operator subgroup in the 2009 survey, the price mean for January 1, 2009 for expanded basic service was \$49.12 in communities with a finding of effective competition at the time of the 2008 survey, and \$53.92 in communities where the finding was made after the 2008 survey.

				Table 1 onthly Prionuary 1, 20								
				Subgroups	of Effective	Competiti	on Comn	nunities				
Date	Overall Weighted	Non-	Weighted	Second	d Cable Oper	rator		Wire-	LP			
	Average	Competitive	Average	Weighted Average	Incumbent	Rival	DBS	less MVPD	Test			
	Basic Service											
1/1/2009	\$17.65	\$17.88	\$17.16	\$16.05	\$16.00	\$16.26	\$17.29	\$18.25	\$20.50			
1/1/2008	\$16.52	\$16.87	\$15.81	\$15.03	\$14.80	\$16.14	\$15.78	\$17.23	\$19.38			
Change	6.9%	6.0%	8.5%	6.8%	8.1%	0.7%	9.6%	5.9%	5.8%			
			Ex	panded Ba	sic							
1/1/2009	\$52.37	\$52.10	\$52.96	\$51.58	\$52.37	\$47.86	\$53.61	\$52.34	\$51.29			
1/1/2008	\$49.43	\$49.31	\$49.68	\$48.13	\$49.08	\$43.68	\$50.31	\$49.93	\$48.30			
Change	5.9%	5.7%	6.6%	7.2%	6.7%	9.6%	6.6%	4.8%	6.2%			
compared t	tive competit to noncompe lly significan		1.7%*	-1.0%	0.5%	-8.1%*	2.9%*	0.5%	-1.6%			
		E	Expanded B	asic Price	Per Channe	el						
1/1/2009	\$0.71	\$0.72	\$0.69	\$0.64	\$0.67	\$0.48	\$0.71	\$0.69	\$0.71			
1/1/2008	\$0.68	\$0.69	\$0.66	\$0.59	\$0.62	\$0.45	\$0.68	\$0.68	\$0.67			
Change	4.4%	4.3%	4.5%	8.5%	8.1%	6.7%	4.4%	1.5%	6.0%			
compared t	tive competit to noncompe lly significan		-4.2%*	-11.1%*	-6.9%*	-33.3%*	-1.4%	-4.2%*	-1.4%			
			Di	igital Servi	ce							
1/1/2009	\$15.55	\$15.47	\$15.71	\$17.21	\$16.78	\$19.37	\$15.23	\$14.34	\$16.39			
1/1/2008	\$14.50	\$14.38	\$14.73	\$16.31	\$15.71	\$19.28	\$14.25	\$12.79	\$15.65			
Change	7.2%	7.6%	6.7%	5.5%	6.8%	0.5%	6.9%	12.1%	4.7%			

Sources: Attachments 2, 3 and 4. Expanded basic includes basic service and the most subscribed tier of cable programming. \*The difference is statistically significant at the 95 percent level of confidence.

18. Prices of rival operators in communities where a second operator is present were 8.1 percent lower on average than prices charged by operators providing service in noncompetitive communities. These prices were also 33.3 percent lower on a per channel basis. Among the other subgroups of effective competition communities, average prices are arrayed close to the prices in noncompetitive communities. Only the price differential in the DBS market share subgroup is statistically significant. All of the prices are lower in effective competition communities on a per channel basis (almost all the differences are statistically significant). As of January 1, 2009, average prices and price per channel were lower by 1.0 percent and 11.1 percent, respectively, in communities found to have effective competition due to the presence of a second operator (other than a wireless or DBS operator); 0.5 percent higher and 6.9 percent lower for incumbents in the second operator subgroup; 2.9 percent higher and 1.4 percent lower for communities with a finding based upon DBS market share; 0.5 percent

higher and 4.2 percent lower in areas overlapped by a wireless MVPD operator; and 1.6 and 1.4 percent lower where operators met the low penetration test by serving fewer than 30 percent of households.

As shown in Table 2, the average price of expanded basic service grew historically at a compound annual rate of 6.3 percent over the 14-year period from 1995-2009, just above the one-year 2009 increase of 5.9 percent shown in Table 1.<sup>22</sup> Over the same 14-year period, the average number of channels received with expanded basic service increased at a compound annual rate of 4.2 percent. For comparison, the Consumer Price Index ("CPI") for All Items published by the Bureau of Labor Statistics ("BLS") as a measure of general price inflation grew from 138.4 to 138.5 (0.1 percent) over the year ending January 2009, and at a compound annual rate of 2.4 percent from 1995 to 2009. BLS also publishes a CPI for Cable, Satellite, and Radio Services. This index increased from 181.1 to 183.7 (1.4 percent) over the year ending January 2009 and at a compound annual rate of 4.4 percent from 1995 to 2009. Because it covers a different mix of services and is adjusted for the number of programming channels, the Cable, Satellite, and Radio CPI cannot be compared directly with the change in cable prices in our survey.

		Price A	ble 2 Averages 5-2009			
	Expa	nded Basic Se	rvice	Digital	CPI	CPI
Year	Price	Channels	Price per Channel	Service Price	(All Items)	(Cable, Satellite and Radio)
Jul. 1995	\$22.35	44	\$0.60		100.0	100.0
Jul. 1996	\$24.28	47	\$0.61		103.0	106.9
Jul. 1997	\$26.31	49	\$0.63		105.2	114.9
Jul. 1998	\$27.88	50	\$0.65	\$10.70	107.0	122.6
Jul. 1999	\$28.94	51	\$0.65	\$9.49	109.3	127.0
Jul. 2000	\$31.22	55	\$0.66	\$8.42	113.3	132.9
Jul. 2001	\$33.75	59	\$0.60	\$11.58	116.4	139.1
Jul. 2002	\$36.47	63	\$0.66	\$10.12	118.1	147.8
Jan. 2003	\$38.95	68	\$0.65	\$10.08	119.1	154.7
Jan. 2004	\$41.04	70	\$0.66	\$10.72	121.4	160.7
Jan. 2005	\$43.04	71	\$0.62	\$12.99	125.0	167.0
Jan. 2006	\$45.26	71	\$0.65	\$13.83	130.0	171.8
Jan. 2007	\$47.27	73	\$0.67	\$13.00	132.7	176.4
Jan. 2008	\$49.65	73	\$0.68	\$14.01	138.4	181.1
Jan. 2009	\$52.37	78	\$0.71	\$15.55	138.5	183.7
1995-2009 change	134%	77%	18%		39%	84%
Compound average annual percent change	6.3%	4.2%	1.2%		2.4%	4.4%
Source: Attachment 5.						

### B. Programming Expense for Expanded Basic

20. Table 3 displays information on programming expense incurred by operators related to the provision of expanded basic service, stated on an average monthly per-subscriber basis.<sup>23</sup> These

<sup>&</sup>lt;sup>22</sup> For 2008, the expanded basic price of \$49.43 in Table 1 is from the 2009 survey and does not match the price of \$49.65 in Table 2, which is from the 2008 survey, because these two averages are from different survey samples.

<sup>&</sup>lt;sup>23</sup> This measure is an approximation, calculated by dividing the programming cost in each year by the number of end-of-year basic cable service subscribers, and dividing by 12 (months). The programming expense numbers are (continued....)

expenses include the increases in fees for existing programming as well as additional fees for new programming added during the year. Programming expenses increased on an average monthly basis by an estimated \$1.32 per subscriber, or 8 percent, from year-end 2007 to year-end 2008. These increases in programming expenses represent 55 percent of the overall increase in price for expanded basic service during this period.

Table 3 Change in Monthly Programming Expense per Subscriber											
		Nī	Subgro	ups of Effec	tive Comp	etition Com	munities				
Expanded Basic Service	Overall	Non- Competitive	Group Overall	Second Operator	DBS	Wireless MVPD	LP Test				
2008 expense	\$17.67	\$17.80	\$17.42	\$19.66	\$16.85	\$15.01	\$16.15				
2007 expense	\$16.35	\$16.32	\$16.42	\$17.64	\$16.25	\$13.72	\$15.23				
Change in expense	\$1.32	\$1.48	\$1.00	\$2.02	\$0.60	\$1.29	\$0.92				
Change in price	\$2.38	\$2.48	\$1.91	\$2.33	\$1.62	\$2.48	\$2.87				
Expense change to price change*	55%	60%	52%	87%	37%	52%	32%				

# C. Family Programming Package

- 21. The survey sought data on "family-friendly" programming, which was defined as a package of channels that is marketed by cable operators as a substitute for the larger, expanded basic service. A number of cable operators offer such programming as an alternative targeted toward subscribers who may object to some of the programming on expanded basic. Based on the survey responses, the typical family programming package includes the basic service channels and some, but not all, of the channels carried on expanded basic. Further, because the family package is almost always offered as digital programming, it typically includes some, but not all, of the channels carried on digital tiers.
- While 47 percent of subscribers were offered a family-friendly programming package as of January 1, 2009, less than one-half of one percent (0.4%) actually subscribed, the others electing to take basic service only or expanded basic service.<sup>24</sup> The typical family package requires use of a digital converter and remote control or other digital gateway. Some operators bundle this digital equipment with the family package, while in other cases equipment is leased separately. As of January 1, 2009, the average monthly price for the family package, including the additional price of equipment if not included in the package, was \$32.76, falling somewhere between the average price of basic service (\$17.65) and expanded basic (\$52.37) shown in Table 1. On average, operators offered 42 channels with the family package, compared to 30 channels and 78 channels, respectively, for basic and expanded basic service as shown in Tables 4 and 5.

While this low percentage may in part reflect the newness of these offerings, an examination of the data indicate that family packages generally lack sports programming such as ESPN and thus many families may not consider the package to be a viable alternative to expanded basic service.

# D. Programming Networks Sold on an Individual Basis

23. The survey asked whether operators offered, on an individual basis, any of the networks found on expanded basic or other tiers of cable programming, as of January 1, 2009. Excluding premium and video-on-demand programming, operators in 6 of the 762 communities in our sample offered one or two networks individually. The offerings were limited to four networks – Fox Sports South, Golf Channel, TBS, and WGN America. Monthly prices for one of these individual networks ranged from \$1.00 to \$1.53 and the average price was \$1.30. In order to subscribe to these individual networks, operators required that the subscriber purchase basic service. In addition, to receive the Golf Channel, operators required that the subscriber lease a digital converter set-top box.

### **E.** Distribution of Channels

24. Table 4 shows the average number of channels offered with basic service as of January 1, 2009. Overall, basic service averaged 30 channels as of that date. The number of channels offered varied only slightly among the sample groups. The table divides these channels into four categories: (1) local broadcast stations; (2) PEG access; (3) commercial leased access; and (4) all other channels.

Table 4 Distribution of Basic Service Channels											
Catagory of Channel		Non- Competitive	Subgroups	of Effective C	ompetit	ion Commu	nities				
Category of Channel January 1, 2009	Overall		Group Overall	Second Operator	DBS	Wireless MVPD	LP Test				
Local broadcast stations	13	12	15	14	15	16	13				
PEG access	3	3	3	4	3	3	1				
Commercial leased access	1	1	1	1	1	1	1				
Other channels	<u>13</u>	<u>14</u>	<u>12</u>	<u>14</u>	<u>12</u>	<u>11</u>	<u>12</u>				
Basic service total	<b>Basic service total</b> 30 29 31 32 31 37 27										
Source: Attachment 9. Component	s may not ad	d to totals due to re	ounding.								

25. Table 5 displays the average number of expanded basic channels as of January 1, 2009, consisting of: the sum of channels on the basic service tier and the most-subscribed tier of cable programming. Operators offered an average of 78 expanded basic channels, an increase of 3 percent from the prior year. An average of 86 channels was offered in communities with a second operator, 10 percent more channels than were offered by operators in the noncompetitive group of communities.

Table 5 Expanded Basic Channels										
January 1, 2009		Non- Competitive	Subgroups	s of Effective (	Competit	ion Commu	nities			
	Overall		Group Overall	Second Operator	DBS	Wireless MVPD	LP Test			
Expanded basic service	78	78	79	86	77	77	75			
Prior year (1/1/08)	76	75	77	86	75	73	73			
Percent Change	3%	4%	3%	0%	3%	5%	3%			
Source: Attachment 10.										

26. Table 6 shows the number of channels offered to subscribers as of January 1, 2009, on the most subscribed tier of digital programming. Operators offered an average of 54 channels, an increase of 26 percent over the 43 channels offered in the previous year.

Table 6 Channels on Most Subscribed Digital Tier										
January 1, 2009		Non- Competitive	Subgroup	s of Effective	Competit	tion Commu	ınities			
	Overall		Group Overall	Second Operator	DBS	Wireless MVPD	LP Test			
Digital tier	54	53	57	54	59	42	54			
Prior year (1/1/08)	43	42	45	43	46	35	45			
Percent Change	26%	26%	27%	26	28%	20%	20%			
Source: Attachment 4.										

# F. Subscriber Equipment

Table 7 shows that over the 12 months ending January 1, 2009, the average monthly price charged to lease standard definition digital equipment to receive programming services (consisting of a standard definition set-top converter and remote control unit) decreased by 2.0 percent to \$4.55. For high definition digital equipment, prices increased by 0.6 percent to \$8.19 over the same period. The monthly price to lease a CableCARD increased by an average of 10.6 percent to \$1.62 for the year ending January 1, 2009.

Table 7 Monthly Equipment Prices											
		Non- Competitive	Subgrou	ps of Effective	Competit	ion Commu	nities				
January 1, 2009	Overall		Overall	Second Operator	DBS	Wireless MVPD	LP Test				
Analog equipment Annual change*	\$3.70	\$3.45	\$4.16	\$5.27	\$3.82	\$4.00	\$4.12				
	1.1%	-2.6%	8.0%	36.6%	-0.6%	0.0%	10.0%				
Digital equipment Annual change*	\$4.55	\$4.30	\$5.07	\$5.75	\$4.91	\$3.45	\$5.52				
	-2.0%	-3.0%	0.3%	-0.6%	0.7%	-0.1%	0.1%				
HD equipment Annual change*	\$8.19	\$8.49	\$7.62	\$8.07	\$7.52	\$6.61	\$7.93				
	0.6%	0.8%	-0.2%	2.6%	-1.4%	-0.1%	1.6%				
CableCARD Annual change*	\$1.62	\$1.56	\$1.73	\$2.04	\$1.66	\$1.39	\$1.58				
	10.6%	12.8%	7.3%	2.0%	10.8%	-0.8%	0.8%				
Source: Attachment 12. *	Compared wit	th January 1, 2008.									

# **G.** Service Installation Charges

Table 8 below displays the nonrecurring charges that cable television subscribers may incur for service installation. As of January 1, 2009, the average one-time charge to install cable service was \$46.14 in a residence not previously wired for cable, and \$33.69 in a pre-wired residence, excluding any promotional discounts. These charges represent a 0.2 percent decrease and a 4.0 percent increase, respectively, for an unwired and a pre-wired residence. Subscribers were charged \$31.10, on average, for service reconnection, which is a 5.0 percent increase from the previous year. The average charge to

install a CableCARD was \$23.94 and \$25.89, respectively, for existing and new customers, representing a 3.6 percent increase and a 0.4 percent decrease in price, respectively, for existing and new customers.

Table 8 Service Installation Charges										
Type of Installation		Non-	Subgrou	ps of Effecti	ve Compe	tition Com	munities			
January 1, 2009	Overall	Competitive	Overall	Second Operator	DBS	Wireless MVPD	LP Test			
Unwired residence	\$46.14	\$46.71	\$44.92	\$43.58	\$44.47	\$54.25	\$48.74			
Annual Change*	-0.2%	-0.3%	0.0%	-5.3%	1.7%	2.0%	3.8%			
Pre-wired residence	\$33.69	\$33.52	\$34.06	\$33.43	\$33.79	\$33.87	\$43.23			
Annual Change*	4.0%	3.0%	6.2%	-0.1%	8.9%	2.4%	8.2%			
Service reconnection	\$31.10	\$30.65	\$32.05	\$31.98	\$32.28	\$29.16	\$32.44			
Annual Change*	5.0%	3.3%	8.8%	5.2%	11.1%	0.2%	3.5%			
CableCARD, standard	\$23.94	\$23.01	\$25.85	\$32.46	\$23.21	\$35.54	\$16.24			
Annual Change*	3.6%	5.9%	0.1%	-3.7%	1.5%	1.8%	10.7%			
CableCARD, new customer	\$25.89	\$24.01	\$29.77	\$30.48	\$29.27	\$40.56	\$19.02			
Annual Change*	-0.4%	0.4%	-1.0%	-9.2%	1.7%	1.9%	15.5%			
Source: Attachment 13. * Compared	d with Januar	y 1, 2008.			·					

# H. System Operating Capacity

29. Table 9 below shows that system capacity averaged 770 MHz as of January 1, 2009, a 1.7 percent increase over the previous year. Operators in noncompetitive communities had average capacity of 757 MHz (an increase of 1.1 percent), and operators in effective competition communities averaged 797 MHz (an increase of 3.4 percent). Most subscribers (86.5 percent) were served by a system with capacity of 750 MHz or above. Fewer than 10 percent (9.6 percent) of all subscribers were served by systems that operated between 750 MHz and 330 MHz. Fewer than 1 percent (0.8 percent) of subscribers were served by systems with operating capacity below 330 MHz. In addition, 3.1 percent of subscribers were served by systems not measured in MHz.<sup>25</sup>

	Table 9 System Operating Capacity (MHz)											
		Non-	Subg	roups of Effe	ctive Compet	ition Commu	nities					
Date	Overall	Competitive	Overall	Second Operator	DBS	Wireless MVPD	LP Test					
January 1, 2009	770	757	797	808	801	778	670					
January 1, 2008	757	749	771	791	769	778	663					
Percent change	1.7%	1.1%	3.4%	2.1%	4.2%	0.0%	1.1%					
		Percent o	f Subscribers	(Jan. 1, 2010	))							
		By MHz Ca	pacity of The	eir Cable Syst	tem							
750 or above	86.5%	82.6%	94.7%	98.1%	94.6%	100.0%	66.2%					
331 - 749 MHz	9.6%	11.7%	5.1%	0.9%	5.4%	0.0%	33.8%					
330 or below	0.8%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%					
Other *	3.1%	4.5%	0.2%	1.0%	0.0%	0.0%	0.0%					
Source: Attachment	14. * Systems	with architectures	not measured i	n MHz.								

<sup>&</sup>lt;sup>25</sup> These are newer systems and primarily employ DSL broadband architectures.

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# I. Service Availability and Subscription

30. Table 10 displays the percentage of basic service subscribers that were offered various services as of January 1, 2009, and the percent that subscribed to those services. The table shows that 98 percent of subscribers overall were offered video programming in digital format, either in standard or high definition (HD), and 63 percent of subscribers purchased digital programming. Further, 92 percent were offered HD digital programming and 27 percent subscribed. In addition, 96 percent of subscribers were offered Internet access and 50 percent subscribed; and 91 percent were offered telephony with 28 percent of subscribers taking that service. Subscribers in effective competition communities were offered (and subscribed to) these services at somewhat higher percentages than in noncompetitive communities.

Table 10 Availability and Subscribers to Services										
	Overall	Non- Competitive	Subgroup	os of Effective	Competi	tion Commu	ınities			
January 1, 2009			Overall	Second Operator	DBS	Wireless MVPD	LP Test			
Availability as a Percent of All Basic Service Subscribers										
Digital video programming	98%	96%	100%	100%	100%	100%	97%			
HD video programming	92%	90%	97%	100%	96%	100%	86%			
Internet access	96%	94%	99%	100%	100%	100%	92%			
Telephony	91%	88%	97%	97%	98%	100%	75%			
Su	bscribers :	as a Percent of A	All Basic Ser	vice Subscrib	ers					
Digital video programming	63%	60%	69%	76%	66%	73%	67%			
HD video programming	27%	25%	30%	39%	27%	35%	18%			
Internet access	50%	50%	52%	65%	47%	56%	40%			
Telephony	28%	27%	28%	42%	23%	30%	16%			
Sources: Attachments 15 and 16.										

### J. Receipts from Services

- 31. The questionnaire asked operators to report for each system the average bill paid by residential customers for specified services, including taxes and fees, for the month of January 2009, in addition to list prices for service packages. The questionnaire focused on three groups of residential basic service subscribers: (1) those that take only one service video programming ("video only"); (2) those that take two services video and Internet access ("double play"); and (3) those that take three services video, Internet access, and telephony ("triple play").<sup>26</sup> The information is presented below, in Table 11.
- 32. The list prices for these services averaged \$52.37 for expanded basic service, \$86.86 for a double play package, and \$116.74 for a triple play package. Receipts were higher than the package prices due to taxes, franchise fees, and customers ordering features not included in the packages such as premium and pay-per-view programming. Offsets to these factors include short-term promotional price discounts to induce customers to migrate to a package service, and also discounts based on the bundling of equipment, features, and premium programming with the package. The average monthly bill was \$92.10 per customer for all services purchased as of January 1, 2009. The video-only customers paid an

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<sup>&</sup>lt;sup>26</sup> Price changes are not reported as the 2009 survey did not collect information for January 2008. In addition, the survey did not collect separate information on double-play subscribers who take video and telephony only. However, these customers and revenues are reflected in the average receipts of all subscribers shown in the table.

average monthly bill of \$63.92 in January 2009. Double-play customers who subscribed to both video programming and Internet access service paid a monthly average bill of \$107.64. Triple-play subscribers paid an average bill of \$145.10 per month for those services.

Table 11 Receipts and Prices by Service Package										
		Non-	Subgrou	ps of Effecti	ve Compet	ition Comn	nunities			
January 1, 2009	Overall	Competitive	Overall Second Operator		DBS	Wireless MVPD	LP Test			
Average Monthly Receipts per Subscriber										
All services*	\$92.10 \$91.54 \$93.27 \$110.32 \$89.01 \$77.39 \$									
Video only service	\$63.92	\$63.94	\$63.90	\$66.15	\$63.29	\$63.73	\$60.75			
Double play package	\$107.64	\$108.11	\$106.73	\$114.50	\$106.21	\$87.36	\$92.90			
Triple play package	\$145.10	\$146.52	\$142.49	\$145.21	\$142.78	\$135.57	\$126.31			
		Average Pric	e by Packag	e						
Expanded basic	\$52.37	\$52.10	\$52.96	\$51.58	\$53.61	\$52.34	\$51.29			
Double play package	\$86.86	\$85.75	\$89.02	\$87.96	\$90.14	\$82.19	\$84.79			
Triple play package	\$116.74	\$116.97	\$116.27	\$108.71	\$118.99	\$116.38	\$117.64			
Sources: Attachments 2, 11, and may include other video packag										

33. Table 12 shows the percent of subscribers who take video service only compared to subscribers who take a video and Internet double play package or a triple play package. Over half of these subscribers (53 percent) took an enhanced package of services as of January 1, 2009. On average 39 percent subscribed to video only, 28 percent to a video and Internet double play, 25 percent to a triple play package, and 8 percent of subscribers subscribed to other packages or services.<sup>27</sup>

Table 12 Subscribers by Service Package Percent of All Subscribers										
January 1, 2009		Non-	Subgrou	ps of Effecti	ve Compet	tition Comn	nunities			
	Overall	Competitive	Overall	Second Operator	DBS	Wireless MVPD	LP Test			
Video only service	39%	41%	35%	26%	37%	49%	48%			
Double play package	28%	27%	30%	28%	32%	21%	26%			
Triple play package	Triple play package 25% 24% 26% 39% 22% 21% 16%									
Other Services*	8%	8%	9%	7%	9%	9%	10%			

Sources: Attachment 19. \* These include subscribers to video-telephony double play package and non-video services such as Internet and/or telephony only.

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<sup>&</sup>lt;sup>27</sup> For this question, subscriber information was collected regarding basic service subscribers (who take video) and non-video subscribers. Other packages and services may include a video and telephony double-play as well as non-video subscribers taking Internet and/or telephony services only.

### IV. CONCLUSIONS

34. Expanded basic cable prices increased by 5.9 percent for the 12 months ending January 1, 2009. This compares to a 0.1 percent increase in general inflation as measured by the CPI (All Items). Compared to the overall average price charged by operators in the effective competition communities, average prices were lowest (9.6 percent lower) for rival operators in communities with at least two wireline operators and highest (1.2 percent higher) when a finding was granted based on DBS market share exceeding the 15 percent threshold established by the statute. The price of expanded basic service historically has increased at a compound average annual rate of 6.3 percent over the 14-year period from 1995-2009, just above the one-year 2009 increase of 5.9 percent. In comparison, general inflation as measured by the CPI (All Items) increased at a compound annual rate of 2.4 percent over the same 14-year period.

## V. ORDERING CLAUSE

35. IT IS ORDERED that this Report be issued pursuant to authority contained in Section 623(k) of the Communications Act of 1934, as amended, 47 U.S.C. § 543(k).

FEDERAL COMMUNICATIONS COMMISSION

William T. Lake Chief, Media Bureau

Attachment 1 2009 Survey Overview										
Sample Group	Percent of Subscribers	Number of Communities	Sample Size	Sample Responses						
Sample Groups Overall										
Noncompetitive communities	68.35%	26,868	359	349						
<b>Effective Competition Communities</b>	31.65%	7,034	413	413						
Grand Total 100% 33,902 772 762										
Noncompetitive Communities (Stratified by Size of Cable System Serving the Community)										
Very large (more than 75,000 subscribers)	46.09%	6,957	124	122						
<b>Large</b> (25,001 - 75,000 subscribers)	24.55%	5,001	72	72						
<b>Medium</b> (10,001 - 25,000 subscribers)	13.10%	4,279	54	54						
<b>Small</b> (1,001 - 10,000 subscribers)	14.00%	6,683	71	68						
Very Small (1,000 or fewer subscribers)	2.26%	3,948	38	33						
Total	100%	26,868	359	349						
Subgroups of Effo (Stratified on Basis of										
Incumbent operators	20.20%	470	70	70						
Second "rival" operators	4.28%	418	<u>70</u>	<u>70</u>						
Based on presence of second operator *	24.48%	888	140	140						
Based on level of DBS subscribers **	66.62%	4,990	208	208						
In signal range of a wireless MVPD **	5.14%	155	31	31						
Low penetration test ***	3.76%	1,001	34	34						
Total	100%	7,034	413	413						

Sources: FCC Form 322, Cable Community Registration, filings pursuant to 47 C.F.R § 76.1801; FCC Form-325, Annual Cable Operator Report, filings pursuant to 47 C.F.R § 76.403; FCC effective competition findings pursuant to 47 U.S.C. § 543(a)(2); and 2009 survey.

Note: Noncompetitive communities are those without a finding of effective competition. Effective competition communities are those where the operator has a finding of effective competition, as of January 1, 2009. The percent of subscribers is the estimated percent of total subscribers of all operators registered with the Commission. The sample response rate was 99 percent (762 of 772) of communities.

<sup>\*</sup> Finding based on the presence of a second operator in the community other than a DBS or wireless MVPD.

<sup>\*\*</sup> The survey collects information on prices charged by wireline operators. The survey does not collect information on prices charged by DBS and wireless MVPD operators.

<sup>\*\*\*</sup> Operators who met the low penetration test as a result of serving fewer than 30 percent of households.

# Attachment 2 Average Monthly Price

			January 1	1, 2009	January 1, 2008			
Sample Group	Video Programming Service	n	Mean	Standard Error	n	Mean	Standard Error	
Sample groups	Basic service	762	\$17.65	0.26	738	\$16.52	0.24	
overall	Cable programming		\$34.72	0.37	738	\$32.92	0.35	
	Expanded basic service		\$52.37	0.23	738	\$49.43	0.23	
Noncompetitive	Basic service	349	\$17.88	0.36	326	\$16.87	0.34	
Communities	Cable programming	349	\$34.21	0.51	326	\$32.45	0.49	
	Expanded basic service	349	\$52.10	0.33	326	\$49.31	0.33	
All Effective	Basic service	413	\$17.16	0.26	412	\$15.81	0.24	
Competition Communities	Cable programming	413	\$35.80	0.34	412	\$33.87	0.30	
Communities	Expanded basic service	413	Mean         Error         n         Mean         Error           62         \$17.65         0.26         738         \$16.52         0.24           62         \$34.72         0.37         738         \$32.92         0.35           62         \$52.37         0.23         738         \$49.43         0.23           49         \$17.88         0.36         326         \$16.87         0.34           49         \$34.21         0.51         326         \$32.45         0.49           49         \$52.10         0.33         326         \$49.31         0.33           13         \$17.16         0.26         412         \$15.81         0.24           13         \$35.80         0.34         412         \$33.87         0.30           13         \$52.96         0.20         412         \$49.68         0.19           40         \$16.05         0.30         140         \$15.03         0.27           40         \$35.53         0.42         140         \$33.10         0.39           40         \$16.00         0.31         70         \$14.80         0.25           40         \$36.37         0.46         70 <td>0.19</td>	0.19				
Casand an anotan	Basic service	140	\$16.05	0.30	140	\$15.03	0.27	
Second operator subgroup (all)	Cable programming	140	\$35.53	0.42	140	\$33.10	0.39	
	Expanded basic service	140	\$51.58	0.34	140	\$48.13	Standard Error           0.24           0.35           0.23           0.34           0.49           0.33           0.24           0.30           0.19           0.27           0.39           0.34           0.25           0.43           0.40           0.97           0.98           0.42           0.24           0.22           0.29           0.15           1.55           1.85	
Second operator	Basic service	70	\$16.00	0.31	70	\$14.80	0.25	
subgroup (incumbents)	Cable programming	70	\$36.37	0.46	70	\$34.28	0.43	
(incumbents)	Expanded basic service	70	\$52.37	0.40	70	\$49.08	Color   Colo	
Second operator	Basic service	70	\$16.26	0.90	70	\$16.14	0.97	
subgroup (rivals)	Cable programming	70	\$31.60	1.07	70	\$27.55	0.98	
	Expanded basic service	70	\$47.86	0.45	70	\$43.68	0.42	
	Basic service	208	\$17.29	0.36	207	\$15.78	0.34	
DBS subgroup	Cable programming	208	\$36.32	0.47	207	\$34.53	0.42	
	Expanded basic service	208	\$53.61	0.27	207	\$50.31	0.24	
Wireless MVDD	Basic service	31	\$18.25	0.20	31	\$17.23	0.22	
Wireless MVPD subgroup	Cable programming	31	\$34.09	0.31	31	\$32.71	0.29	
	Expanded basic service	31	\$52.34	0.17	31	\$49.93	0.15	
Low penetration test	Basic service	34	\$20.50	1.74	34	\$19.38	1.55	
subgroup	Cable programming	34	\$30.79	2.04	34	\$28.92	1.85	
	Expanded basic service	34	\$51.29	1.09	34	\$48.30	0.94	

# Attachment 3 Price per Channel

	Video	Ja	nuary 1, 20	008	Ja	nuary 1, 20	009
Sample Group	Programming Service	N	Mean	Std. Error	n	Mean	Std. Error
	Basic service	736	\$0.65	0.011	762	\$0.69	0.012
Sample groups overall	Expanded basic	736	\$0.68	0.006	762	\$0.71	0.007
	Digital service	690	\$0.50	0.034	714	\$0.37	0.012
Namaannatiti	Basic service	324	\$0.67	0.015	349	\$0.71	0.017
Noncompetitive Communities	Expanded basic	324	\$0.69	0.009	349	\$0.72	0.010
	Digital service	286	\$0.52	0.051	308	\$0.36	0.015
All Effective	Basic service	412	\$0.60	0.012	413	\$0.63	0.014
Competition	Expanded basic	412	\$0.66	0.004	413	\$0.69	0.005
Communities	Digital service	404	\$0.47	0.018	406	\$0.39	0.019
Second operator subgroup (all)	Basic service	140	\$0.52	0.016	140	\$0.57	0.020
	Expanded basic	140	\$0.59	0.007	140	\$0.64	0.009
	Digital service	133	\$0.64	0.036	135	\$0.42	0.026
Garan I amanatan	Basic service	70	\$0.53	0.018	70	\$0.58	0.023
Second operator subgroup (incumbents)	Expanded basic	70	\$0.62	0.007	70	\$0.67	0.010
<i>5</i> 1 ( )	Digital service	70	\$0.42	0.020	70	\$0.42	0.031
G 1 .	Basic service	70	\$0.48	0.036	70	\$0.54	0.036
Second operator subgroup (rivals)	Expanded basic	70	\$0.45	0.016	70	\$0.48	0.019
	Digital service	63	\$1.79	0.195	65	\$0.40	0.013
	Basic service	207	\$0.60	0.017	208	\$0.64	0.020
DBS subgroup	Expanded basic	207	\$0.68	0.005	208	\$0.71	0.007
	Digital service	207	\$0.41	0.023	207	\$0.37	0.026
M. 1 MADD	Basic service	31	\$0.73	0.020	31	\$0.62	0.018
Wireless MVPD subgroup	Expanded basic	31	\$0.68	0.002	31	\$0.69	0.004
	Digital service	31	\$0.62	0.044	31	\$0.63	0.048
T	Basic service	34	\$0.76	0.034	34	\$0.78	0.039
Low penetration test subgroup	Expanded basic	34	\$0.67	0.020	34	\$0.71	0.026
<i>C</i> - "r	Digital service	33	\$0.38	0.026	33	\$0.34	0.027

Source: 2009 survey. Price per channel equals price divided by number of channels and is based on the average of the weighted price per channel in each community, which will not exactly match the number derived from using the price and channel values in this table.

Attachment 4 Digital Service

Sample Group	Date	Percent of Subscribers Taking Digital Service				Price of ubscribed ital Progr		Su	ıbscribe	on Most d Tier of gramming
		n	Mean	Standard Error	n	Mean	Standard Error	n	Mean	Standard Error
Sample groups overall	1/1/09	760	63.2%	0.8	715	\$15.55	0.17	714	54.0	0.9
Overall	1/1/08	736	56.5%	0.8	696	\$14.50	0.16	690	42.7	0.8
Noncompetitive communities	1/1/09	347	60.5%	1.1	308	\$15.47	0.24	308	52.7	1.2
	1/1/08	324	54.1%	1.2	289	\$14.38	0.24	286	41.6	1.1
All Effective Competition	1/1/09	413	69.1%	0.7	407	\$15.71	0.14	406	56.6	1.1
Communities	1/1/08	412	61.3%	0.7	407	\$14.73	0.14	404	44.7	0.9
Second operator subgroup (all)	1/1/09	140	75.8%	1.0	135	\$17.21	0.18	135	54.2	1.4
subgroup (aii)	1/1/08	140	69.6%	1.0	136	\$16.31	0.17	133	42.9	1.1
Second operator subgroup	1/1/09	70	76.7%	1.0	70	\$16.78	0.19	70	55.2	1.6
(incumbents)	1/1/08	70	70.0%	1.0	70	\$15.71	0.18	70	44.7	1.1
Second operator	1/1/09	70	71.2%	3.3	65	\$19.37	0.56	65	49.1	1.0
subgroup (rivals)	1/1/08	70	67.4%	3.5	66	\$19.28	0.48	63	33.5	3.3
DBS subgroup	1/1/09	208	66.4%	0.9	207	\$15.23	0.20	207	58.8	1.6
220 Suegroup	1/1/08	207	57.8%	1.0	207	\$14.25	0.19	207	46.1	1.2
Wireless MVPD	1/1/09	31	72.8%	0.8	31	\$14.34	0.22	31	41.6	1.4
subgroup	1/1/08	31	66.0%	0.5	31	\$12.79	0.19	31	34.9	1.8
Low penetration test	1/1/09	34	67.4%	3.7	34	\$16.39	0.67	33	54.3	3.2
subgroup	1/1/08	34	62.5%	3.9	33	\$15.65	0.65	33	45.3	3.1

Source: 2009 survey. \* Includes one digital converter and remote control unit.

Attachment	5
Averages	
1995-2009	

			nded Basic S udes Basic Se			System	CPI:	CPI:	Inflation Adjusted
Date*	Basic Service	Price	Channels	Price Per Channel	Digital Price	Capacity (MHz)	Cable, Satellite, & Radio	All Items	Price of Expanded Basic
1995		\$22.35	44.0	\$0.60			100.0	100.0	\$22.35
1996		\$24.28	47.0	\$0.61			106.9	103.0	\$23.58
1997		\$26.31	49.4	\$0.63			114.9	105.2	\$25.00
1998	\$12.06	\$27.88	50.1	\$0.65	\$10.70		122.6	107.0	\$26.05
1999	\$12.58	\$28.94	51.1	\$0.65	\$9.49	534	127.0	109.3	\$26.47
2000	\$12.84	\$31.22	54.8	\$0.66	\$8.42	623	132.9	113.3	\$27.55
2001	\$12.84	\$33.75	59.4	\$0.60	\$11.58	652	139.1	116.4	\$29.00
2002	\$14.45	\$36.47	62.7	\$0.66	\$10.12	694	147.8	118.1	\$30.88
2003	\$13.45	\$38.95	67.5	\$0.65	\$10.08		154.7	119.1	\$32.69
2004	\$13.80	\$41.04	70.3	\$0.66	\$10.72	734	160.7	121.4	\$33.79
2005	\$14.30	\$43.04	70.5	\$0.62	\$12.99	736	167.0	125.0	\$34.42
2006	\$14.59	\$45.26	71.0	\$0.65	\$13.83	749	171.8	130.0	\$34.81
2007	\$15.33	\$47.27	72.6	\$0.67	\$13.00	748	176.4	132.7	\$35.61
2008	\$16.11	\$49.65	72.8	\$0.68	\$14.01	759	181.1	138.4	\$35.87
2009	\$17.65	\$52.37	78.2	\$0.71	\$15.55	770	183.7	138.5	\$37.83
Percent Change: 1995-2009		134.3%	77.7%	18.3%			83.7%	38.5%	69.2%

<sup>\*</sup> Missing data indicate we did not survey the metric that year. Yearly values are for January except years 1995-2002 (July). 2008 averages are from the 2008 survey and, thus, do not match 2008 averages from the 2009 survey. (The Appendix discusses statistical variance between survey samples). The 1995 price was derived by subtracting an estimate of equipment from a combined video programming and equipment price. For 1995-2000 prices and 2000-2001 channels and capacities, values are for noncompetitive communities, since an overall average was not reported. Other averages are subscriber-weighted composite averages. Digital Price is the price of the most subscribed digital tier of cable programming plus equipment consisting of a digital converter and remote control unit. The inflation-adjusted price of expanded basic is in 1995 dollars and equals [(expanded basic price / CPI, All Items) x 100].

Sources: Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment, 12 FCC Rcd 3239 (1997) ("1997 survey"); 14 FCC Rcd 8331 (1999) ("1998 survey"); 15 FCC Rcd 10927 (2000) ("1999 survey"); 16 FCC Rcd 4346 (2001) ("2000 survey"); 17 FCC Rcd 6301 (2002) ("2001 survey"); 18 FCC Rcd 13284 (2003) ("2002 survey"); 20 FCC Rcd 2718 (2005) ("2004 survey"); 21 FCC Rcd 15087 (2006) ("2005 survey"); 24 FCC Rcd 259 (2009) ("2006-2008 surveys"); and 2009 survey. Sources by year: 1995-1997 (1997 survey); 1998 (1998 survey); 1999 (1999 survey) except capacity (2004 survey data); 2000 (2000 survey); 2001 (2001 survey); July 2002 (2002 survey); 2003-2004 (2004 survey); 2005 (2005 survey) except price per channel (2005 survey data); 2006 (2006 survey) except price per channel (2006 survey); and 2009 (2009 survey).

CPI sources: Bureau of Labor Statistics. CPI - Cable and Satellite Television and Radio Service, U.S. City Average, Not Seasonally Adjusted, Series CUUR0000SERA02, Dec. 1983=100, (rebased to July 1995=100). CPI - All Items, U.S. City Average, Not Seasonally Adjusted, Series CUUR0000SA0, 1982-84=100 (rebased to July 1995=100). Retrieved from http://:www.bls.gov, Feb. 19, 2010.

Attachment 6
Averages of Noncompetitive Communities

Date	Basic Service	Cable	Expanded B	Basic Service	System Capacity
Date	Dasie Service	Programming	Price	Channels	(MHz)
July 1995			\$22.35	44.0	
July 1996			\$24.28	47.0	
July 1997			\$26.31	49.4	
July 1998	\$12.06	\$15.82	\$27.88	50.1	
July 1999	\$12.58	\$16.36	\$28.94	51.1	532
July 2000	\$12.84	\$18.38	\$31.22	54.8	623
July 2001	\$12.87	\$21.02	\$33.89	59.3	652
July 2002	\$14.47	\$22.14	\$36.61	62.7	696
January 2003	\$13.38	\$25.73	\$39.11	67.3	
January 2004	\$13.73	\$27.56	\$41.29	70.1	734
January 2005	\$14.25	\$29.08	\$43.33	70.3	734
January 2006	\$14.52	\$30.96	\$45.48	70.6	747
January 2007	\$15.10	\$32.39	\$47.49	72.5	744
January 2008	\$15.83	\$34.14	\$49.97	72.8	757
January 2009	\$17.88	\$34.21	\$52.10	77.7	757
Percent Change			133.1%	76.5%	

Source: See Attachment 5 sources and notes.

Attachment 7
Averages of Effective Competition Communities

Date	Basic Service	Cable	Expanded Ba	nsic Service	System Capacity
Date	Dasic Service	Programming	Price	Channels	(MHz)
July 1995			\$21.64	38.0	
July 1996			\$23.32	39.6	
July 1997			\$25.29	46.5	
July 1998	\$11.12	\$15.00	\$26.12	54.0	
July 1999	\$12.03	\$15.27	\$27.30	52.3	619
July 2000	\$12.03	\$17.41	\$29.44	59.9	630
July 2001	\$12.43	\$19.23	\$31.66	60.9	666
July 2002	\$14.09	\$20.25	\$34.34	62.9	677
January 2003	\$14.25	\$22.61	\$36.86	69.7	
January 2004	\$14.58	\$23.59	\$38.17	72.5	734
January 2005	\$14.80	\$25.35	\$40.15	72.0	754
January 2006	\$15.09	\$28.62	\$43.70	74.0	765
January 2007	\$16.37	\$29.90	\$46.28	73.0	766
January 2008	\$17.37	\$30.82	\$48.19	73.0	772
January 2009	\$17.16	\$17.16	\$52.96	79.3	797
Percent Change, 1995-2009			144.7%	108.7%	

Sources: See Attachment 5 sources and notes.

# Attachment 8 Monthly Programming Expense per Subscriber Expanded Basic Service

Sample Group	Year of Expense	n	Mean *	Standard Error
Sample groups overall	2008	736	\$17.67	0.20
Sample groups of oran	2007	724	\$16.35	0.18
Noncompetitive Communities	2008	324	\$17.80	0.28
1 voiceompetative Communities	2007	312	\$16.32	0.25
All Effective Competition Communities	2008	412	\$17.42	0.18
711 Effective Competition Communities	2007	412	\$16.42	0.20
Second operator subgroup (all)	2008	140	\$19.66	0.25
Second operator subgroup (an)	2007	140	\$17.64	0.24
Second operator subgroup (incumbents)	2008	70	\$18.90	0.30
Second operator subgroup (mountoents)	2007	70	\$17.38	0.28
Second operator subgroup (rivals)	2008	70	\$23.26	0.32
Second operator subgroup (rivals)	2007	70	\$18.87	0.40
DBS subgroup	2008	207	\$16.85	0.25
DDS successor	2007	207	\$16.25	0.29
Wireless MVPD subgroup	2008	31	\$15.01	0.13
The less in the subgroup	2007	31	\$13.72	0.13
Low penetration test subgroup	2008	34	\$16.15	0.68
Low pendution test subgroup	2007	34	\$15.23	0.65

<sup>\*</sup> This measure is an approximation, calculated by dividing the programming cost in each year by the number of end-of-year basic cable service subscribers, and dividing by 12 (months). The programming expense numbers are for the previous year rather than the survey year because survey questionnaires are sent too early in the year for operators to be able to provide programming expense information for the survey year.

# Attachment 9 Basic Service Channels January 1, 2009

						By C	ategory	of Chan	nel			
Sample Group	n	Number of Channels		Broad	Local Broadcast Stations		Public, Educational & Governmental		Commercial Leased Access		Other Channels	
		Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	
Sample groups overall	762	29.5	0.5	12.7	0.2	2.9	0.1	0.7	0.0	13.3	0.5	
Noncompetitive Communities	349	28.8	0.7	11.8	0.3	2.6	0.1	0.6	0.1	13.8	0.7	
All Effective Competition Communities	413	30.8	0.5	14.5	0.2	3.3	0.1	0.9	0.0	12.1	0.4	
Second operator subgroup (all)	140	32.1	0.6	14.4	0.3	3.5	0.2	0.5	0.0	13.7	0.5	
Second operator subgroup (incumbents)	70	31.1	0.7	14.5	0.3	3.7	0.2	0.5	0.1	12.5	0.5	
Second operator subgroup (rivals)	70	36.5	1.8	13.9	0.5	2.6	0.2	0.4	0.1	19.6	1.5	
DBS subgroup	208	30.6	0.7	14.6	0.3	3.4	0.1	1.0	0.1	11.6	0.5	
Wireless MVPD subgroup	31	30.6	0.6	15.5	0.2	2.7	0.1	1.3	0.1	11.2	0.4	
Low penetration test subgroup	34	26.8	1.9	13.3	0.8	1.4	0.2	0.5	0.1	11.7	1.7	

# Attachment 10 Expanded Basic Channels

		Ja	nuary 1,	2009	Ja	nuary 1,	2008
Sample Group	Video Programming Service	N	Mean	Std. Error	N	Mean	Std. Error
	Basic service	762	29.5	0.5	738	29.1	0.6
Sample groups overall	Cable programming	762	48.7	0.8	738	46.6	0.6
	Expanded basic service		78.2	1.0	738	75.8	0.8
Nama	Basic service	349	28.8	0.7	326	28.9	0.9
Noncompetitive Communities	Cable programming	349	48.8	1.2	326	46.1	0.9
	Expanded basic service	349	77.7	1.4	326	75.0	1.1
All Ecc. di co Commedidion	Basic service	413	30.8	0.5	412	29.6	0.4
All Effective Competition Communities	Cable programming	413	48.5	0.5	412	47.8	0.4
	Expanded basic service	413	79.3	0.5	412	77.4	0.4
Coord on another subsequen	Basic service		32.1	0.6	140	33.9	0.8
Second operator subgroup (all)	Cable programming	140	53.7	0.8	140	51.8	0.7
	Expanded basic service	140	85.8	1.1	140	85.7	0.9
Casand anapatar subgroup	Basic service		31.1	0.7	70	30.6	0.6
Second operator subgroup (incumbents)	Cable programming	70	48.4	0.5	70	50.1	0.4
	Expanded basic service	70	79.5	0.8	70	80.6	0.7
Casand an anatan ash anasan	Basic service	70	36.5	1.8	70	49.4	3.7
Second operator subgroup (rivals)	Cable programming	70	78.9	4.0	70	60.1	3.3
	Expanded basic service	70	115.4	4.9	70	109.5	3.9
	Basic service	208	30.6	0.7	207	28.7	0.6
DBS subgroup	Cable programming	208	46.7	0.6	207	46.2	0.5
	Expanded basic service	208	77.4	0.7	207	74.9	0.5
	Basic service	31	30.6	0.6	31	24.8	0.5
Wireless MVPD subgroup	Cable programming	31	46.0	0.7	31	48.5	0.5
	Expanded basic service	31	76.6	0.4	31	73.3	0.2
Low penetration test	Basic service	34	26.8	1.9	34	26.0	1.9
subgroup	Cable programming	34	48.2	2.7	34	47.4	2.4
	Expanded basic service	34	75.0	2.6	34	73.4	2.1

# Attachment 11 Double and Triple Play Packages January 1, 2009

Sample Group	Variable	Vide	eo and Int Package	ernet	Video, Internet, and Telephony Package			
Sumple Stoup	, minot	n	Mean	S.E.	n	Mean	S.E.	
Sample groups overall	Package price	624	\$86.86	0.66	661	\$116.74	0.67	
	Video channels	623	142.2	2.9	662	148.2	2.7	
Noncompetitive	Package price	261	\$85.75	0.96	276	\$116.97	0.96	
Communities	Video channels	260	128.9	3.9	276	138.1	3.6	
All Effective Competition	Package price	363	\$89.02	0.61	385	\$116.27	0.62	
Communities	Video channels	363	167.8	3.8	386	168.1	3.5	
Second operator subgroup (all)	Package price	120	\$87.96	0.71	133	\$108.71	1.11	
	Video channels	120	187.9	4.7	133	173.2	3.7	
Second operator subgroup	Package price	53	\$90.55	0.86	67	\$110.44	1.32	
(incumbents)	Video channels	53	183.1	4.5	67	164.3	3.3	
Second operator subgroup	Package price	67	\$78.29	1.07	66	\$100.49	1.27	
(rivals)	Video channels	67	206.0	14.1	66	214.9	14.0	
DBS subgroup	Package price	187	\$90.14	0.84	195	\$118.99	0.82	
	Video channels	187	167.2	5.3	195	169.1	5.0	
Wireless MVPD subgroup	Package price	31	\$82.19	1.21	31	\$116.38	1.15	
	Video channels	31	115.0	5.0	31	146.7	5.2	
Low penetration test	Package price	25	\$84.79	2.84	26	\$117.64	2.60	
subgroup	Video channels	25	139.0	13.5	27	145.8	12.4	

**Attachment 12 Prices for Subscriber Equipment\*** 

Samula Cuarra	Data		Analog			Digital		Hig	h Defin	ition	CableCARD		
Sample Group	Date	n	Mean	S.E.	n	Mean	S.E.	n	Mean	S.E.	n	Mean	S.E.
Sample groups overall	2009	326	\$3.70	0.13	719	\$4.55	0.11	685	\$8.19	0.12	660	\$1.62	0.08
overan	2008	396	\$3.66	0.11	702	\$4.64	0.11	660	\$8.14	0.11	648	\$1.47	0.06
Noncompetitive	2009	135	\$3.45	0.18	309	\$4.30	0.16	282	\$8.49	0.17	264	\$1.56	0.12
communities	2008	150	\$3.54	0.16	292	\$4.43	0.15	259	\$8.42	0.17	254	\$1.39	0.09
All Effective Competition	2009	191	\$4.16	0.13	410	\$5.07	0.10	403	\$7.62	0.08	396	\$1.73	0.06
Communities	2008	246	\$3.85	0.11	410	\$5.05	0.09	401	\$7.64	0.09	394	\$1.62	0.06
Second operator	2009	50	\$5.27	0.17	138	\$5.75	0.12	138	\$8.07	0.12	132	\$2.04	0.07
subgroup (all)	2008	78	\$3.86	0.18	138	\$5.78	0.10	136	\$7.86	0.13	131	\$2.00	0.07
Second operator subgroup	2009	33	\$5.49	0.19	70	\$6.04	0.13	70	\$7.79	0.13	70	\$1.78	0.08
(incumbents)	2008	60	\$3.90	0.20	70	\$5.99	0.11	70	\$7.55	0.14	70	\$1.83	0.09
Second operator	2009	17	\$3.28	0.19	68	\$4.33	0.32	68	\$9.43	0.27	62	\$3.46	0.12
subgroup (rivals)	2008	18	\$3.24	0.19	68	\$4.78	0.28	66	\$9.44	0.26	61	\$2.94	0.11
DBS subgroup	2009	110	\$3.82	0.18	207	\$4.91	0.14	203	\$7.52	0.11	207	\$1.66	0.09
	2008	135	\$3.84	0.15	207	\$4.88	0.12	203	\$7.62	0.12	206	\$1.49	0.09
Wireless MVPD	2009	18	\$4.00	0.09	31	\$3.45	0.28	31	\$6.61	0.06	31	\$1.39	0.11
subgroup	2008	18	\$4.00	0.09	31	\$3.46	0.28	31	\$6.61	0.06	31	\$1.40	0.11
Low penetration test	2009	13	\$4.12	0.48	34	\$5.52	0.43	31	\$7.93	0.28	26	\$1.58	0.21
subgroup	2008	15	\$3.74	0.50	34	\$5.52	0.43	31	\$7.81	0.28	26	\$1.57	0.21

Source: 2009 survey.

\* Analog, Digital and High Definition subscriber equipment include an addressable converter box and remote control unit.

Attachment 13 Service Installation Charges

		Service Installation								CableCA	ARD In	stallation	1
Sample Group	Date	n	Un-wi Reside		Pre-w Reside		Servi Recon		n	Exist Custo	0	Nev Custo	
			Mean	S.E.	Mean	S.E.	Mean	S.E.		Mean	S.E.	Mean	S.E.
Sample groups	2009	761	\$46.14	0.85	\$33.69	0.81	\$31.10	0.51	730	\$23.94	0.74	\$25.89	0.70
overall	2008	739	\$46.23	0.79	\$32.38	0.77	\$29.61	0.46	711	\$23.11	0.60	\$25.99	0.67
Noncompetitive communities	2009	349	\$46.71	1.21	\$33.52	1.15	\$30.65	0.69	322	\$23.01	1.06	\$24.01	0.99
Communities	2008	327	\$46.87	1.16	\$32.54	1.13	\$29.68	0.66	303	\$21.72	0.84	\$23.92	0.96
All Effective Competition	2009	412	\$44.92	0.71	\$34.06	0.63	\$32.05	0.63	408	\$25.85	0.64	\$29.77	0.66
Communities	2008	412	\$44.91	0.45	\$32.08	0.40	\$29.47	0.40	408	\$25.84	0.61	\$30.07	0.62
Second operator	2009	140	\$43.58	0.82	\$33.43	0.74	\$31.98	0.73	137	\$32.46	1.15	\$30.48	0.94
subgroup (all)	2008	140	\$46.03	0.64	\$33.46	0.75	\$30.41	0.85	137	\$33.72	1.14	\$33.56	1.01
Second operator	2009	70	\$43.10	0.86	\$36.34	0.74	\$35.38	0.82	70	\$30.87	1.10	\$34.77	1.08
subgroup (incumbents)	2008	70	\$45.87	0.61	\$36.27	0.75	\$33.54	0.98	70	\$34.34	1.25	\$38.07	1.13
Second operator	2009	70	\$45.84	2.37	\$19.69	2.41	\$15.97	1.59	67	\$40.25	4.06	\$9.36	1.54
subgroup (rivals)	2008	70	\$46.76	2.33	\$20.18	2.38	\$15.63	1.55	67	\$30.68	2.75	\$11.36	2.19
DBS subgroup	2009	207	\$44.47	1.01	\$33.79	0.89	\$32.28	0.90	207	\$23.21	0.85	\$29.27	0.91
<i>S</i> 1	2008	207	\$43.74	0.62	\$31.04	0.52	\$29.05	0.51	207	\$22.86	0.80	\$28.78	0.83
Wireless MVPD	2009	31	\$54.25	0.92	\$33.87	0.48	\$29.16	0.52	31	\$35.54	1.59	\$40.56	1.31
subgroup	2008	31	\$53.21	0.77	\$33.08	0.39	\$29.11	0.50	31	\$34.92	1.50	\$39.82	1.24
Low penetration test	2009	34	\$48.74	2.55	\$43.23	2.53	\$32.44	1.20	33	\$16.24	2.59	\$19.02	2.95
subgroup	2008	34	\$46.95	2.31	\$39.96	2.54	\$31.33	1.17	33	\$14.67	1.79	\$16.46	2.22

# **Attachment 14 System Operating Capacity**

		Capacit	y in Me	egaher	tz (MHz	)		Subscribers l heir Commu		
Sample Group	Jan. 1, 2008			J	an. 1, 20	09	750 MHz or Above	Above 330 & Below 750	330 MHz or Below	Other*
	n	Mean	S.E.	n	Mean	S.E.	Mean	Mean	Mean	Mean
Sample groups overall	729	757	4.5	741	770	4.7	86.5%	9.6%	0.8%	3.1%
Noncompetitive Communities	321	749	6.5	332	757	6.6	82.6%	11.7%	1.2%	4.5%
All Effective Competition Communities	408	771	3.4	409	797	4.6	94.7%	5.1%	0.0%	0.2%
Second operator subgroup (all)	136	791	7.0	136	808	7.6	98.1%	0.9%	0.0%	1.0%
Second operator subgroup (incumbents)	70	785	8.4	70	805	9.0	98.9%	1.1%	0.0%	0.0%
Second operator subgroup (rivals)	66	819	6.3	66	822	6.7	94.5%	0.0%	0.0%	5.5%
DBS subgroup	207	769	4.2	208	801	6.1	94.6%	5.4%	0.0%	0.0%
Wireless MVPD subgroup	31	778	3.4	31	778	3.4	100.0%	0.0%	0.0%	0.0%
Low penetration test subgroup	34	663	21.3	34	670	20.3	66.2%	33.8%	0.0%	0.0%

Source: 2009 survey.

\* Consists of systems with architectures not measured in MHz.

# Attachment 15 Availability of Services January 1, 2009

Samuel Carre	Availability of Service as a	Percent of Basic S	Service Subsc	ribers
Sample Group	Service	n	Mean	Std. Error
	Digital video programming	762	97.5%	0.5
Sample groups overall	HD video programming	762	92.1%	0.9
r C mp	Internet access	761	96.0%	0.6
	Telephony	762	90.9%	0.9
	Digital video programming	349	96.4%	0.7
Noncompetitive Communities	HD video programming	349	89.9%	1.2
Noncompetitive Communities	Internet access	348	94.4%	0.9
	Telephony	349	88.1%	1.3
	Digital video programming	413	99.8%	0.1
All Effective Competition	HD video programming	413	97.0%	0.8
Communities	Internet access	413	99.4%	0.3
	Telephony	413	96.9%	0.7
	Digital video programming	140	99.8%	0.2
Second operator subgroup	HD video programming	140	99.5%	0.3
(all)	Internet access	140	100.0%	0.0
	Telephony	140	97.2%	1.0
	Digital video programming	70	100.0%	0.0
Second operator subgroup	HD video programming	70	100.0%	0.0
(incumbents)	Internet access	70	100.0%	0.0
	Telephony	70	98.9%	1.0
	Digital video programming	70	98.6%	1.3
Second operator subgroup	HD video programming	70	97.3%	1.8
(rivals)	Internet access	70	100.0%	0.0
	Telephony	70	89.0%	3.4
	Digital video programming	208	100.0%	0.0
DDG 1	HD video programming	208	96.4%	1.2
DBS subgroup	Internet access	208	99.5%	0.4
	Telephony	208	97.7%	1.0
	Digital video programming	31	100.0%	0.0
W' 1 MUDD 1	HD video programming	31	100.0%	0.0
Wireless MVPD subgroup	Internet access	31	100.0%	0.0
	Telephony	31	100.0%	0.0
	Digital video programming	34	97.2%	2.8
	HD video programming	34	85.9%	5.8
Low penetration test subgroup	Internet access	34	91.6%	4.6
	Telephony	34	74.7%	7.2

# Attachment 16 Service Subscribers January 1, 2009

Sample Group	Subscribers as a Percent of Basic Service Subscribers								
The state of	Service	n	Mean	Std. Error					
	Digital video programming	760	63.2%	0.8					
Sample groups overall	HD video programming	761	26.5%	0.7					
Sumpre groups overun	Internet Access	703	50.5%	0.8					
	Telephony	693	27.5%	0.9					
	Digital video programming	347	60.5%	1.1					
Noncompetitive	HD video programming	348	24.9%	0.9					
Communities	Internet Access	325	49.8%	1.2					
	Telephony	317	27.4%	1.3					
	Digital video programming	413	69.1%	0.7					
All Effective Competition	HD video programming	413	30.0%	0.6					
Communities	Internet Access	378	51.9%	0.7					
	Telephony	376	27.9%	0.7					
	Digital video programming	140	75.8%	1.0					
Second operator subgroup	HD video programming	140	38.8%	1.0					
(all)	Internet Access	105	64.8%	1.0					
	Telephony	103	42.3%	1.2					
	Digital video programming	70	76.7%	1.0					
Second operator subgroup	HD video programming	70	38.9%	1.0					
(incumbents)	Internet Access	70	62.1%	1.1					
	Telephony	70	38.4%	1.3					
	Digital video programming	70	71.2%	3.3					
Second operator subgroup	HD video programming	70	38.5%	2.9					
(rivals)	Internet Access	35	77.9%	2.2					
	Telephony	33	61.2%	3.5					
	Digital video programming	208	66.4%	0.9					
DDC1	HD video programming	208	27.0%	0.9					
DBS subgroup	Internet Access	208	47.5%	0.9					
	Telephony	208	23.1%	1.0					
	Digital video programming	31	72.8%	0.8					
Window MVDD - 1	HD video programming	31	35.3%	0.5					
Wireless MVPD subgroup	Internet Access	31	56.1%	0.7					
	Telephony	31	29.8%	0.5					
	Digital video programming	34	67.4%	3.7					
Low penetration test	HD video programming	34	17.7%	2.0					
subgroup	Internet Access	34	40.2%	2.8					
	Telephony	34	16.4%	2.1					

	Attachment 17 Expanded Basic and Family Package Subscribers January 1, 2009									
	Percent of Basic S	Service Subscribe	ers							
Sample Group	Variable*	n	Mean	Std. Error						
	Offered limited basic service	762	95.3%	0.7						
Sample groups overall	Subscribe to expanded basic	758	86.7%	0.6						
Sample groups overall	Offered a family package	761	46.7%	1.9						
	Subscribe to the family package	759	0.4%	0.2						
	Offered limited basic service	349	93.7%	1.0						
Noncompetitive	Subscribe to expanded basic	345	85.6%	0.9						
Communities	Offered a family package	349	43.6%	2.6						
	Subscribe to the family package	348	0.5%	0.3						
	Offered limited basic service	413	98.6%	0.5						
All Effective Competition	Subscribe to expanded basic	413	89.0%	0.4						
Communities	Offered a family package	412	53.4%	2.2						
	Subscribe to the family package	411	0.3%	0.2						
	Offered limited basic service	140	98.8%	0.5						
Second operator subgroup	Subscribe to expanded basic	140	92.9%	0.2						
(all)	Offered a family package	140	43.6%	3.2						
	Subscribe to the family package	139	0.3%	0.2						
	Offered limited basic service	70	100.0%	0.0						
Second operator subgroup	Subscribe to expanded basic	70	92.1%	0.3						
	Offered a family package	70	51.9%	3.8						
	Subscribe to the family package	70	0.0%	0.0						
	Offered limited basic service	70	93.1%	2.7						
Second operator subgroup	Subscribe to expanded basic	70	96.6%	0.5						
(rivals)	Offered a family package	70	4.1%	2.1						
	Subscribe to the family package	69	1.4%	0.9						
	Offered limited basic service	208	98.6%	0.8						
DDG 1	Subscribe to expanded basic	208	87.5%	0.6						
DBS subgroup	Offered a family package	207	56.0%	3.0						
	Subscribe to the family package	207	0.3%	0.2						
	Offered limited basic service	31	100.0%	0.0						
W' -1 MVDD and arrang	Subscribe to expanded basic	31	91.6%	0.2						
Wireless MVPD subgroup	Offered a family package	31	74.7%	3.1						
	Subscribe to the family package	31	0.0%	0.0						
	Offered limited basic service	34	94.4%	3.9						
Low penetration test	Subscribe to expanded basic	34	87.0%	2.0						
subgroup	Offered a family package	34	43.7%	7.9						
				<u> </u>						

Source: 2009 Survey. \* For purposes of this attachment, "limited basic service" refers to the basic service tier offered by systems that also offer a separate expanded basic service. *See* at 11 and note 17, above. The survey results indicate that 4.7% of subscribers (100% - 95.3%) receive basic service from operators that do not offer a separate expanded basic service tier, whereas 95.3% of subscribers receive limited basic service and have the option of purchasing a separate expanded basic service tier; 86.7% of all subscribers actually purchase an expanded basic service tier. The 4.7% of subscribers who are not offered limited basic are treated, for purposes of this attachment, as expanded basic subscribers and comprise a portion of the 86.7% of subscribers that take expanded basic service.

1.3%

Subscribe to the family package

# Attachment 18 Family Programming Package January 1, 2009

Sample Group	Variable*	n	Mean	Std. Error
	Basic service price	306	15.15	0.27
Sample groups overall	Family package price	309	32.76	0.28
Sample groups overall	Basic service channels	310	28.1	0.6
	Family package channels	294	42.0	0.6
	Basic service price	124	14.80	0.41
Noncompetitive	Family package price	124	32.39	0.41
Communities	Basic service channels	124	26.6	0.8
	Family package channels	309         32.76         0.28           310         28.1         0.6           294         42.0         0.6           124         14.80         0.41           124         32.39         0.41           124         26.6         0.8           120         40.6         0.8           182         15.75         0.18           185         33.39         0.26           186         30.6         0.6           174         44.4         0.6           32         15.21         0.27           33         33.91         0.36           34         29.7         0.7           34         43.7         0.7           31         34.01         0.36           31         34.01         0.36           31         34.01         0.36           31         29.8         0.7           31         43.8         0.7           31         43.8         0.7           3         37.7         5.2           112         15.57         0.25           113         33.15         0.35           113 <t< td=""><td>0.8</td></t<>	0.8	
	Basic service price	182	15.75	0.18
All Effective Competition	Family package price	185	33.39	0.26
Communities	Basic service channels	186	30.6	0.6
	Family package channels	174	44.4	0.6
	Basic service price	32	15.21	0.27
Second operator subgroup	Family package price	33	33.91	0.36
(all)	Basic service channels	34	29.7	0.7
	Family package channels	34	43.7	0.7
	Basic service price	31	15.20	0.27
Second operator subgroup	Family package price	31	34.01	0.36
Second operator subgroup (incumbents)	Basic service channels	31	29.8	0.7
	Family package channels	31	43.8	0.7
	Basic service price	1	17.50	0.00
Second operator subgroup	Family package price	2	25.19	0.14
(rivals)	Basic service channels	3	24.3	2.1
	Family package channels	3	37.7	5.2
	Basic service price	112	15.57	0.25
DRS subgroup	Family package price	113	33.15	0.35
DDS subgroup	Basic service channels	113	31.3	0.8
	Family package channels	104	44.9	0.9
	Basic service price	25	18.79	0.25
Wireless MVPD subgroup	Family package price	25	33.59	0.09
DBS subgroup  Wireless MVPD subgroup	Basic service channels	25	30.2	0.8
	Family package channels	25	44.3	0.9
	Basic service price	13	16.15	0.92
Low penetration test	Family package price	14	35.15	1.35
subgroup	Basic service channels	14	22.5	1.6
	Family package channels	11	37.3	2.2

<sup>\*</sup> The family package consists of basic service and a tier of family programming. Basic service statistics differ from those reported in Attachments 2 and 10 because the means are for the subset of communities where a family package is offered.

# Attachment 19 Package Receipts and Shares January 1, 2009

		Mo	nthly Rec	oints		Percen	t of Sub	scribers	
Sample Group	Services*		er Subscri		n	All Subscr		Basic Se Subscri	
		n	Mean	S.E.		Mean	S.E.	Mean	S.E.
	All Services	749	92.10	0.90	728	100.0%	0.0	100.0%	0.0
Sample groups overall	Video service only	715	63.92	0.72	728	39.0%	0.7	41.4%	0.7
Sample Sloups overall	Double play package	682	107.64	2.04	728	28.1%	0.5	30.7%	0.6
	Triple play package	643	145.10	1.18	728	24.7%	0.6	27.9%	0.9
	All Services	342	91.54	1.25	328	100.0%	0.0	100.0%	0.0
Noncompetitive	Video service only	320	63.94	1.04	328	40.9%	1.0	43.1%	1.0
communities	Double play package	291	108.11	3.06	328	27.3%	0.8	29.4%	0.8
	Triple play package	263	146.52	1.74	328	24.1%	0.9	27.5%	1.2
	All Services	407	93.27	0.97	400	100.0%	0.0	100.0%	0.0
All Effective	Video service only	395	63.90	0.56	400	35.2%	0.7	37.9%	0.6
Competition Communities	Double play package	391	106.73	0.74	400	29.8%	0.4	33.3%	0.5
Communities	Triple play package	380	142.49	0.96	400	26.0%	0.5	28.8%	0.5
	All Services	135	110.32	1.45	128	100.0%	0.0	100.0%	0.0
Second operator	Video service only	123	66.15	0.58	128	26.0%	0.8	27.2%	0.8
subgroup (all)	Double play package	122	114.50	1.10	128	27.6%	0.8	29.5%	0.9
	Triple play package	120	145.21	1.12	128	39.4%	1.0	43.3%	1.1
	All Services	70	110.14	1.55	70	100.0%	0.0	100.0%	0.0
Second operator	Video service only	70	66.57	0.63	70	28.5%	0.8	29.6%	0.8
subgroup (incumbents)	Double play package	70	115.61	1.15	70	29.7%	0.8	31.5%	1.0
(incumbents)	Triple play package	70	147.68	0.95	70	37.0%	1.1	38.8%	1.1
	All Services	65	111.25	3.93	58	100.0%	0.0	100.0%	0.0
Second operator	Video service only	53	63.53	1.51	58	12.3%	1.9	13.5%	2.0
subgroup (rivals)	Double play package	52	107.56	3.45	58	16.1%	1.9	17.9%	2.0
	Triple play package	50	129.11	5.63	58	52.7%	2.6	68.6%	3.5
	All Services	207	89.01	1.34	207	100.0%	0.0	100.0%	0.0
DDC 1	Video service only	207	63.29	0.79	207	36.7%	0.9	39.7%	0.9
DBS subgroup	Double play package	207	106.21	1.00	207	31.5%	0.5	35.6%	0.7
	Triple play package	203	142.78	1.32	207	22.2%	0.6	24.6%	0.7
	All Services	31	77.39	0.87	31	100.0%	0.0	100.0%	0.0
Wireless MVPD	Video service only	31	63.73	0.61	31	48.7%	1.8	51.8%	1.6
subgroup	Double play package	31	87.36	1.59	31	20.7%	1.3	24.6%	1.5
	Triple play package	31	135.57	0.80	31	21.3%	0.2	23.6%	0.2
	All Services	34	80.60	2.95	34	100.0%	0.0	100.0%	0.0
Low penetration test	Video service only	34	60.75	1.71	34	47.9%	2.8	53.3%	2.8
subgroup	Double play package	31	92.90	4.00	34	25.8%	1.8	28.6%	1.9
	Triple play package	26	126.31	7.04	34	15.8%	1.7	18.1%	2.0

Source: 2009 survey. \* All services includes receipts from video only, double play (video and Internet), triple play (video, Internet, and telephony), and other services such as video and telephony, Internet only, telephony only, and installation charges. The percent of subscribers in total taking video only or either a double play or triple play does not add to 100 percent because it does not include subscribers to video-telephony double play packages and non-video services such as Internet and/or telephony only.

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### **APPENDIX**

## **Survey Methodology**

### A. Sampling Procedure

- 1. The 2009 survey was conducted pursuant to the requirements of the Cable Act.<sup>28</sup> Communities were selected nationwide at random to be part of the sample. Selections were made from the Commission's list of MVPD operators and communities the operators serve.<sup>29</sup> For the purpose of sampling, we divided the communities selected into groups. Noncompetitive communities are those where the Commission has not made a finding of effective competition as of January 1, 2009, and effective competition. Further, we subdivided the two groups into strata, and selected a sample of communities from each stratum. For each community selected, the operator in that community was asked to complete a questionnaire that included questions on the prices charged for video programming service offerings as well as other questions related to the operator's system. The information collected was used to estimate and compare mean prices across the different strata of operators and communities. Attachment 1 provides additional information on this sample.
- 2. We divided the groups into strata to compare sub-groups of prices as well as to achieve desirable levels of statistical precision. Creating strata in which prices are less disparate than in the group overall tends to increase the efficiency of sampling by reducing sample price variance.<sup>30</sup> Because there is a correlation between price and the operator's system size, we stratified noncompetitive communities into five strata by system size very large, large, medium, small, and very small systems depending on the number of subscribers the system serves. We stratified effective competition communities into five strata on the basis for which the Commission had made a finding of effective competition. The first stratum consisted of incumbent operators in communities with a second "rival" operator, and the second stratum consisted of the rival operators. The third stratum contained communities where the finding of effective competition was based on the level of DBS subscribers in that community. The fourth stratum consisted of communities within range of a wireless MVPD. The fifth stratum was formed of operators who met the low penetration test as a result of serving fewer than 30 percent of households.<sup>31</sup> The survey collected prices charged by wireline operators. The survey did not collect prices charged by DBS and wireless MVPD operators.<sup>32</sup>
- 3. In each stratum, we determined the optimal number of sample selections required for statistical precision. We used a sampling size formula calibrated to yield a sample price mean within one percent of the actual mean price with a 95 percent confidence level.<sup>33</sup> The formula called for a total of

MVPD refers to a multichannel video programming distributor. The Commission assigns a community unit identifier (CUID) code to each registered operator for each community that operator serves. *See* 47 C.F.R. § 76.1801. If the service area of two operators overlaps the same community, the Commission assigns two CUIDs. We selected from the list of 33,902 active CUIDs as of January 21, 2009. A current list can be downloaded from the Commission's website. *All Cable Communities registered with the FCC*, Excel format. <www.fcc.gov/mb>.

<sup>&</sup>lt;sup>28</sup> See note 1 in Section I. supra.

<sup>&</sup>lt;sup>30</sup> See e.g., W. G. Cochran, Sampling Techniques, 2nd ed. (1977) at 87-107.

<sup>&</sup>lt;sup>31</sup> Low market penetration may have resulted from the presence of a second operator in the community. However, we did not include the second operators in this low penetration stratum, because the finding of effective competition was not made on that basis.

<sup>&</sup>lt;sup>32</sup> This is because there are no CUID codes associated with DBS or wireless operators. For the same reason, AT&T U-verse service was not surveyed.

<sup>&</sup>lt;sup>33</sup> See B. J. Mandel, Statistics for Management (1984) at 258.

323 communities to be selected from the noncompetitive group and allocated among the strata. Allocation methods generally emphasize two criteria: Allocation to a stratum should increase in proportion to size and price variance. Therefore, for each stratum of the noncompetitive group, we multiplied the share of cable subscribers by the standard deviation of price.<sup>34</sup> For an individual stratum, the higher this measure was relative to the other strata, the higher the allocation was to that stratum of the 323 sample selections to be allocated. Because the allocation to the very small systems stratum was less than 30 selections, we increased the number to 30 selections, which is generally considered the minimum sample size that produces a robust sample mean.<sup>35</sup> Finally, each stratum's sample size was multiplied by a non-response factor.<sup>36</sup> In total, across all the strata, the number of sample selections to be drawn equaled 359 of the 26,868 noncompetitive communities.

- 4. For the effective competition communities, the sample size formula was applied individually to each stratum. In the wireless and low-penetration strata, because the sampling formula called for fewer than 30 selections, we increased the sample size in each stratum to 30 communities. Each stratum's sample size was multiplied by a non-response factor. For communities with a second cable operator, selections of rival operators were increased to 70 communities, to equal the number of selections of incumbent operators.<sup>37</sup> In total, across all the strata, the number of sample selections to be drawn equaled 413 of the 7.034 effective competition communities.<sup>38</sup>
- 5. After determining the number of sample selections using the process described above, we drew independent samples of communities from the strata. The sampling method was probability proportional to size (PPS) sampling.<sup>39</sup> A PPS design is efficient for our survey because the relative size of a community in terms of the number of subscribers is correlated with our primary survey study variable (price).<sup>40</sup> We assigned a sample selection probability individually to communities where the probability of selection was in direct proportion to the relative number of subscribers in the community. The higher the level of subscribers relative to the other communities in the stratum, the higher the likelihood was of selection. Finally, PPS sampling requires that a sampling selection probability not exceed 1 (or 100 percent). Before drawing the samples, we identified communities with a probability exceeding 1, substratified these operators into one-unit strata with a probability of selection equal to 1.<sup>41</sup> PPS sampling was applied to the communities not sub-stratified.

<sup>34</sup> See G. W. Snedecor and W. G. Cochran, Statistical Methods, 7th ed. (1980) at 458-59. The allocation formula equaled  $N_hS_h$  /  $\Sigma N_hS_h$ , where N= number of subscribers and S=2008 survey standard deviation in stratum h. The standard deviation included a finite population correction.

<sup>&</sup>lt;sup>35</sup> See C. A. Boneau, Effects of Violations of Assumptions Underlying the t test, Psychological Bulletin, 57 (1960) at 49-54.

<sup>&</sup>lt;sup>36</sup> The non-response factor was based on the percentage of non-responses to our questionnaire for the same stratum in the previous survey, and equaled  $[1+[NR_h/(NR_h+R_h)]]$ , where NR=2008 survey non-responses and R=2008 survey responses in stratum h of the noncompetitive group.

<sup>&</sup>lt;sup>37</sup> To prevent sampling bias, the two samples were drawn independently; *i.e.*, an incumbent being selected did not necessarily mean that the rival would be selected and *vice versa*.

<sup>&</sup>lt;sup>38</sup> This 5.9 percent sampling fraction for effective competition communities is relatively high compared to the noncompetitive group (1.4 percent) because there were relatively fewer communities with a finding of effective competition and a minimum number of sample observations were needed for statistical precision.

<sup>&</sup>lt;sup>39</sup> See SAS Institute 2008. SAS/STAT 9.2 Users Guide. Cary, NC: SAS Institute Inc. We applied the SAS Surveyselect procedure, method = PPS without replacement.

<sup>&</sup>lt;sup>40</sup> See, e.g., F. Yates and P. M. Grundy, "Selection without Replacement from Within Strata with Probability Proportional to Size," *Journal of the Royal Statistical Society*, 15 (1953) at 253-261; and B. K. Som, Practical Sampling Techniques, 2nd ed. (1996).

<sup>&</sup>lt;sup>41</sup> The following procedure was applied by stratum, where unit i = ith community,  $z_i$  = subscribers, Z = subscribers in the stratum, n = sample selections to be drawn,  $\Box_i$  =  $n(z_i/Z)$  and is the sample selection probability, k = number (continued....)

6. As described above, a PPS sample design requires an estimate of the relative number of subscribers in each community. Therefore, we estimated these numbers using the FCC's 1994 census of communities, the most recent census of subscribers at the community level. If the service areas of two communities had merged subsequent to the census, we merged the subscriber counts accordingly. For the communities which were not part of the census, including newly registered communities, the subscriber count was set equal to the mean number of subscribers for the municipality type, *i.e.*, an incorporated city, private settlement, *etc*. Estimates were converted to the level of the survey year by multiplying each community's count by the ratio of 2009 subscribers to the sum of the adjusted census estimates. This conversion was useful, but not necessary since our sampling design only required an estimate of the relative sizes of operators and not the actual number of subscribers.

### **B.** Data Quality Control

- 7. To improve the quality of the survey data and reduce the burden on operators, the survey questionnaire is now web-based. After the samples were drawn, operators serving the communities selected were notified and instructed on how to complete the 2009 survey questionnaire on the Commission's website. Steps were taken to ensure the reliability and accuracy of the data collection. Computer programming checks notified respondents in real time of inconsistent answers. In addition, a second responsible party within each company (other than the person who completed the survey) was asked to certify the completeness and accuracy of the company's responses. The survey response rate (ratio of completed to requested questionnaires) equaled 99 percent (762 of 772) communities. Of the 10 non-responses, 8 cable operators no longer served the community selected, one operator had yet to commence service in the community selected, and another operator had sold its cable operation.
- 8. We systematically examined all questionnaires submitted using a computer program designed to identify answers which appeared to be inaccurate. When a particular response fell outside of its expected reasonable range or was inconsistent with the answers to other questions in the survey, the computer program automatically flagged that response and we contacted the operator and asked that operator to re-check and verify the flagged answer, or make a correction if needed. In all cases, the operators we contacted cooperated with these requests and, where necessary, submitted revised data. Virtually all operators in the sample were asked to review at least one answer. Each of these operators replied with either a data correction or reasonable explanation as to why a particular response was plausible. In the case of missing data, some operators provided these data and others explained that the operating company did not collect the particular information.

### C. Estimation of Means

9. After the responses were collected and checked, estimates of the population means and variances were calculated from the samples based on the response to each survey question. We estimate the values of the responses on a basic subscriber basis rather than a cable community basis. We choose this level of analysis because we are interested in understanding the price paid by the average subscriber rather than the price charged in the average community. These two methods of analysis yield different (Continued from previous page) of communities for which  $\square > 1$ , and k >= 1. We sub-stratified the community with the highest  $\square$  (leaving n-1 selections) and recalculated  $\square$  for all remaining communities. This process was repeated until  $1 >= \square$  for all communities in the stratum. Then selections were drawn using PPS sampling. Besides our procedure, SAS recommends an algorithm, used in the 2008 survey, which lowers  $\square$  to 1 and pre-selects communities if  $\square = 1$ , but does not sub-stratify. Under this algorithm, however, selection probability to a degree is no longer proportionate to subscribers, and thus we have changed to our sub-stratification method.

<sup>&</sup>lt;sup>42</sup> Source: Kagan (March 2009), end-of-year 2008 basic cable video and telephone company video subscribers.

<sup>&</sup>lt;sup>43</sup> Previously the questionnaires were in the form of an Excel spreadsheet. The new web-based form (FCC Form 333) includes several features which ease the respondent's filing burden. For example, the questionnaire pre-fills some survey questions based on information already on file with the Commission, and asks the respondent to verify the information.

results when the number of subscribers in a community is correlated with the response. To estimate the per-subscriber means and variances of those means, we use the Horvitz-Thompson ratio estimator.<sup>44</sup> This estimator is a well-known and unbiased method of estimation applicable to any probability sampling design. The Horvitz-Thompson estimator estimates the ratio of two totals.<sup>45</sup> By appropriately selecting those totals we are able to weight the response from each cable community by the number of subscribers and estimate the per-subscriber mean of the responses. The numerator of our ratio estimator is the estimate of the industry total of the value of the response of the cable community multiplied by the number of basic subscribers in the community. The denominator is the estimate of the industry total of basic subscribers. For example, in estimating the mean basic price the numerator is the estimate of the industry total of the basic price in the community multiplied by the number of basic subscribers in the community. This resulting total is an estimate of total revenues from the purchase of basic service. The denominator is simply the estimate of the total basic subscribers. The resulting product is an estimate of basic service revenue per subscriber. Formally, the estimator of the per basic subscriber mean of variable X is

$$\frac{\sum_{i=1}^{N} \frac{1}{\pi_{i}} X_{i} \cdot Sub_{i}}{\sum_{1=1}^{N} \frac{1}{\pi_{i}} Sub_{i}}$$

where  $X_i$  is the response from cable community i,  $Sub_i$  is the number of basic subscribers in community i, and  $\pi_i$  is the probability of community i being selected into the sample.<sup>46</sup> These means were calculated and reported by subgroups.

### D. Survey Accuracy

10. Because our survey is based on a sample of communities rather than a 100 percent census, the price averages in this report are subject to sampling variance. Expanding the survey to include all communities might increase accuracy, but would also increase the burden of collecting the information. Our sample results are likely to be different from results that would be obtained if we were able to collect prices from all communities nationwide. The attachments report estimates of sampling variance or statistical "standard error" for each price mean. Standard errors can be used to express the degree of confidence that the true mean falls within a range around a sample mean. This is usually expressed as assurance that in 95 out of 100 similar samples, the true mean will fall within the stated range (the "95 percent confidence interval"). Standard errors can also identify whether or not price differences are statistically significant at a 95-percent confidence level. For example, for January 1, 2008,

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This is a change from the method we used to calculate average prices reported in the 2008 report. At that time, we calculated the arithmetic average in each stratum. *See* Statistical Report on Average Rates for Basic Service, Cable Programming Service, and Equipment: 24 FCC Rcd 259 (2009).

<sup>&</sup>lt;sup>45</sup> See, e.g., D. G. Horvitz and D. J. Thompson, "A Generalization of Sampling without Replacement from a Finite Universe," *Journal of the American Statistical Association*, 47 (1952) at 663-685; W. S. Overton and S. V. Stehman, "The Horvitz-Thompson Theorem as a Unifying Perspective for Probability Sampling: With Examples from Natural Resource Sampling," *The American Statistician*, 49(3) (1995); and Cochran (1977) at 259.

<sup>&</sup>lt;sup>46</sup> Means were calculated with SAS statistical software, SMSUB macro algorithm. *See* SAS Institute. Web. 18 Dec 2009. <support.sas.com/kb/25/033.html>.

<sup>&</sup>lt;sup>47</sup> This "95 percent confidence interval" is a range surrounding the sample average plus or minus 1.96 multiplied by the standard error. For example, the price for expanded basic service as of January 1, 2009 averaged \$52.37, and the standard error was 23 cents, as shown in Attachment 2. We estimate at 95-percent confidence that the true average lies between \$51.92 and \$52.82. We arrive at the lower bound subtracting 1.96 x \$0.23 from the average of \$52.37, and the upper bound by adding 1.96 x \$0.23 to \$52.37.

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the sample price mean of expanded basic service for communities overall was \$49.65 in the 2008 survey and \$49.43 in the 2009 survey. This 22 cents difference is not statistically significant because the difference is within the expected range of statistical variance between samples.

11. In addition to the sampling variance discussed above, changes in the composition of sample subgroups affect means. The composition of communities making up the subgroups changed substantially between the 2008 and 2009 surveys as a result of operators starting, ceasing, merging, or transferring operations. Further, the composition changed as a result of findings of effective competition and, therefore, migration of operators in the communities from the noncompetitive group to one of the effective competition subgroups. For example, findings based on the presence of a second operator increased from 165 to 470 communities between the 2008 and 2009 surveys, mostly in communities in which incumbent operators charged relatively high prices for expanded basic service.

<sup>&</sup>lt;sup>48</sup> See, e.g., D. Holt and C. J. Skinner, *Components of Change in Repeated Surveys*, International Statistical Review, 57 (1989) at 1-18.

<sup>&</sup>lt;sup>49</sup> For incumbents in the second operator subgroup in the 2009 survey, the price mean for January 1, 2009 for expanded basic service was \$49.12 in communities with a finding of effective competition at the time of the 2008 survey, and \$53.92 in communities for which the effective competition finding was made after the 2008 survey.